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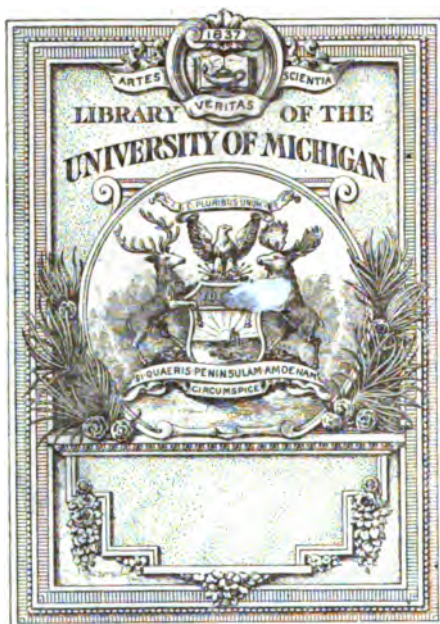
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PUBLIC DOCUMENTS

OF THE

STATE OF WISCONSIN

BEING THE REPORTS OF THE VARIOUS

State Officers, Departments and Institutions

For the Fiscal Term ending June 30, 1902.

VOLUME II



MADISON, WIS.
DEMOCRAT PRINTING COMPANY, STATE PRINTER.
1903.

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PUBLIC DOCUMENTS.

FOR 1901-1902.

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Report of the Inspector of Schools for the Deaf.

TENTH BIENNIAL REPORT

OF THE

BUREAU OF LABOR

AND INDUSTRIAL STATISTICS.

STATE OF WISCONSIN

1900-1901.

HALFORD ERICKSON, Commissioner.



MADISON, WIS.

DEMOCRAT PRINTING COMPANY, STATE PRINTER

1902

LETTER OF TRANSMITTAL.

BUREAU OF LABOR AND
INDUSTRIAL STATISTICS.

MADISON, WIS., September 30, 1902.

To His Excellency HON. R. M. LA FOLLETTE,
Governor of Wisconsin.

DEAR SIR:—I have the honor to transmit herewith the Tenth Biennial Report of this Bureau as required by the laws of this state.

Very Respectfully Yours,
HALFORD ERICKSON,
Commissioner.

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INTRODUCTION.

This is the tenth biennial report of the Bureau of Labor and Industrial Statistics of Wisconsin. The report is made up of ten parts, each one of which is devoted to a separate subject.

Part I relates to the Manufactures of this state in 1899 and 1900. It is based upon the report of 1,152 establishments representing 46 separate industries and about 60 per cent of the productive capacity for the state. The object of these presentations is to show the industrial condition during the period in question. In view of the fact that nearly two-thirds of the productive capacity is represented, and that the data for both years were received from the same establishments, it would seem that the conclusions arrived at can safely be regarded as representing the actual situation.

Part II is devoted to the Population in this state in 1890, 1895, and 1900. It shows for villages, cities, towns and counties, or for each civil subdivision, the actual number of inhabitants at each census. The figures for 1895 were obtained from the state census of that year, while those for 1890 and 1900 were obtained from the federal census of these years. The purpose of this part is to present in a readily available form the population at each census, as well as the changes in the same which took place during the intermediate period.

Part III deals with the condition in the garment-making industries in Milwaukee, the very industries in which the so-

called "sweating system" is generally held to be the most common. The part opens with a general discussion of sweating. It explains the conditions to which this term is applied and gives a few facts in its history. An effort has also been made to point out who the real sweater is, what some of the underlying causes of this evil are, and where the remedy is likely to be found. The conditions in Milwaukee are then taken up, and the conditions of employment and earnings are quite fully presented and analyzed. There is also a discussion of the "housing problem" in which some of the evils of bad housing are set forth, and many possible remedies explained. The part ends with a paper on "The Consumer's Influence on Production," which was prepared by Mr. Clough Gates of Superior, while employed in this Bureau.

Part IV forms a study of the population in Racine, Richland and Crawford counties in this state, during the earlier decades in the history of these counties. The material for these studies was obtained from the returns of the federal census in 1850, 1860, and 1870. These studies cover not only the population in the earlier stages showing its movements from the eastern parts of the state to the westward, but they deal with the soil and topography of the counties as forming a physical basis for the discussion. To the student of history, both general and local, these studies will be found of the greatest importance.

Part V relates to the state government. It gives in a condensed form the laws which govern State Officers, Departments, Boards, Commissions, Institutions, Agents and Agencies, and shows the Powers, Duties, and Privileges of each. It also includes statements giving the expenses of each office, board, institution, commission and agent, during the fiscal year ending June 30, 1900, together with the total receipts and disbursements for the state during the same period. This part will be found a convenient handbook for all who may have business with the state as well as for students and readers in general.

Part VI is a study of the conditions under which women are employed in factories and workshops in this state. The material for this study was obtained through personal visits and observations and has been presented both in tabular and textual form. It is the first part of a series of studies of the conditions of women wage earners that have been planned by the Bureau, and as far as it goes covers the field quite fully. This part will be found interesting not only to students but to the general reader.

Part VII deals with the work of the Free Employment Offices in Milwaukee and Superior, which were provided for by the last legislature. It gives some of the reasons why these offices were established and why they are needed. There is also a brief review of the work of such offices in other countries and other states in this country. Then follows an account of the work of the offices in this state during the first year of their existence, showing the number of applications filed and the number of positions filled, with such an analysis of the facts as was thought proper. Applicants for employment are usually requested to answer a series of questions relating to their condition. These answers were compiled, explained and analyzed, and a portion of this part has been devoted to the material thus obtained.

Part VIII relates to Earnings and Employment. It covers Wholesale and Retail Mercantile Establishments, six Skilled Trades, Municipal Employment, and Labor Organizations. The material upon which this part is based was in all cases except that of Labor Organizations obtained from the employers. It covers Earnings, Range of Employment, Hours of Labor and mode of paying wages. The statistical data for the labor organizations were obtained directly from the secretary of each union. The textual matter on labor organizations was prepared by Mr. J. D. Beck of Cashton, who is employed in this Bureau and has also assisted in the work generally.

Part IX covers our manufacturing statistics for 1900 and 1901, and in addition to this it deals with Employment and Earnings in various other industries that are closely allied to those of manufactures. It also contains an article on Lead and Zinc Mining and the so-called zinc district in the southwestern part of the state. The statistics of manufacture are along the same line as those in part I. They were obtained from identical establishments and show the condition during the period. The article on the lead mining industry has also been carefully prepared by a party who has made a special study of such matters, and will be found both valuable and interesting.

Part X is the last part of the report, and relates to Factory Inspection. It includes a record giving the name, location, business, persons employed and power used, for each establishment. It also contains analyses of the reports of the factory inspectors, and the work that has been performed by them during the present term. On the whole, it presents a mass of industrial facts that cannot fail to prove useful to those who in one way or another are brought in touch with the manufacturing interests of this state.

While the last two sessions of the legislature greatly extended the so-called factory laws and increased the ability of the Bureau to enforce them, there is still need of additional legislation. The laws which regulate the employment and school attendance of children are far from being as stringent and comprehensive as they should be, or as the circumstances demand. The provisions which relate to the sanitary conditions in factories are also weak and fall short of their real purpose. It is also time to consider whether this Bureau should be required to publish a bulletin at least once every three months, dealing with labor and industrial conditions in the state. Such bulletins are issued in other states and are regarded as of the greatest value. Definite recommendations upon these points, however, are withheld for the present.

I am under the greatest obligation to all other employees in this Bureau for their efficient assistance in the work, and also to those who have kindly furnished the data upon which this report is based.

H. E.

ERRATA.

Page 166, at head of classification, for "number counties," read "number villages."

Page 660, in heading of second table, for "as reported by employers" read "as reported by employes."

Page 664, in totals of table at foot of first column for "\$4.97," read "497."

Page 666, in classification of table, for "300 but less than \$100," read "300 but less than \$500."

Page 833, at head of table, for "the employ of last last employer," read "the employ of last employer."

Pages 906 and 907, in headings of tables at bottom of page, for "Semi-weekly," read "Semi-monthly."

PART I.

Manufacturers' Returns for 1899 and 1900.

INTRODUCTION.

This part of the report is devoted to facts and statistics that have been compiled and computed from the annual return of their business for 1899 and 1900 which the manufacturers of this state make to this bureau. The statistical presentations have been compiled from the returns of 1,152 manufacturing establishments classified into 46 separate industries. In order that these presentations may be better understood a few explanations as to how the facts were obtained and the method of compiling them are offered.

The data was collected direct from each establishment upon schedules which were uniform and specially prepared for this purpose. In most cases these schedules were sent out through the mail with a request that they be filled in and returned in the same way. In cases where this method was not thought best the facts were obtained through personal visits and examinations on the part of some one connected with the bureau.

Every precaution was taken to insure correct returns. In the first place the questions in the schedule are of such a nature and so arranged that the answers, when taken together, would reveal errors and any effort to mislead. Then again the returns were carefully edited and compared with past reports. This enabled us to detect, at least the greater part of all important errors that had crept in and to have the same corrected before the facts were compiled.

The facts or figures for all the establishments in each industry have been compiled separately and their totals with the calculations based upon them are presented in one table. This table covers one page in the report. It can therefore be said that one page in this report has been devoted to the facts for each of the 46 industries included. These 46 tables, covering that many industries, and pages, may be regarded as the basic tables, the tables which not only contain the essential facts, but the ones upon which all comparisons, analyses, and generalizations to be made must be based. The figures in these 46 tables have also been compiled into one table, a table which thus necessarily gives the totals for all industries and which follows immediately after those from which it is compiled. As the totals in this last table thus represent all industries the calculations made upon these totals must of course also represent all industries. In other respects, such as in form and the space occupied, the last table differs in no way from those for each industry.

Each of these tables is also so to say, sub-divided according to the nature of the data. Thus it will be found that the first part of it contains presentations which relate to "Classified Weekly Earnings;" that the second part shows the "Number of Persons Employed and the Range of Employment—by months;" and that the third part includes a number of facts under "Other Presentations." Each of these subdivisions need further explanations.

Classified weekly earnings: In this part of the table the mechanics, operatives and laborers employed in the establishments included have been classified according to their weekly earnings. Thus we find here the number of these persons who received less than \$5.00 per week, the number who received \$5.00 per week but less than \$6.00, the number who received \$6.00 per week but less than \$7.00 and so on until the point of \$20.00 per week and over is reached. Above this amount no classification has been made. The males and females are classified separately. That is, the respective number of persons of each sex in each class for earnings appear in separate columns. Another fact which is also shown here is the per cent. relation which the total number in each wage class bear to the total number employed. These illustrations are probably sufficient to convey a fairly good idea

of this table. As a whole this part of the table throws more light upon the conditions as to wages in this state than any other that could have been presented.

Number of persons employed, range of employment—by months: Under this head in the second part of the table is found the number of persons employed during each month as well as the range of employment throughout the year.

The number employed during each month was ascertained by adding together the total number employed each week in the month and dividing the sum thus obtained by the number of these weeks. It is plain that the number obtained through this operation constitutes in reality a sort of an average, and it is believed that it comes nearer to expressing the exact number employed than the number that would have been obtained by any other of the available methods.

What is meant by the range of employment may not be easily seen. Perhaps it may be explained somewhat in this way. The month when the greatest number were employed is regarded as the period of full employment, or in other words, as the month when all who could be employed in the industry in question were so employed. The other months when less persons were employed are regarded as periods when there was only partial employment. The difference between the month when the greatest number were employed and each one of the other months when a smaller number were employed is regarded as the measure of the unemployment at the time. This may be illustrated as follows: In the table for agricultural implements, the first in order, we find that in 1899, the greatest number of persons, 3,581, were employed in February and that the smallest number, 1,466, were employed in September. According to the above there was thus full employment during the former month and 59.34 per cent. less than full employment in the later. In other words, the range of unemployment in September amounted to 21.15 persons, or 59.34 per cent. The same rule when applied to each of the other months will give the range of employment and unemployment in each case.

It is obvious that the range of employment thus obtained can, strictly speaking, only apply to the industry to which it is ap-

plied. Take agricultural implements as an example. Here more than twice as many persons were employed in February as in September. It is not at all likely, however, that all those who had laid off in September when business in this line was dull remained out of work until business in their line picked up again. On the other hand it is more than likely that the greater proportion of those thus out of work had found employment at some other occupation and therefore could not properly be counted among the unemployed. Most industries have their dull periods during the year. But these periods seldom come at the same time for all. Some have their busiest period in the winter, others have it in the summer, spring or fall. While it is a fact that a part of those who are thrown out of work in dull periods find something to do in other lines, it is also true that the supply of labor is, as a rule, often greater than the demand for it, and that a certain proportion are therefore constantly out of work. The calculations of the range of employment as given here are not without importance. Besides throwing a great deal of light upon the course of business, or the ups and downs in the industry to which they directly apply, they show in an unmistakable way that there are great fluctuations in the course of employment, and even to a certain extent afford a fairly reliable measure of these fluctuations.

Other presentations: Under this head in the third part of the tables are included a variety of presentations, more or less closely related. Some of these relate to the persons employed, time in operation and average yearly earnings of each worker; others to the kind of management of the establishments included, and again others to the capital invested, the value of the goods made, the total amount paid as wages and the average amount of capital and product to each person employed. These facts for the two years have also been compared and the increase or decrease in 1900 as compared with 1899 is shown in each case.

Smallest, greatest and average number of persons employed: The figures under this sub-head were obtained from the second part of the table, or the part which deals with the persons employed and range of employment.

By the smallest number of persons is meant the number for the month when the smallest number were employed.

By the greatest number of persons is meant the number for the month when the greatest number of persons were employed.

By the average number of persons is meant the average number of persons employed during each year. This number was obtained by adding the number for each month and dividing the sum of this by twelve, or by the number of months.

Average yearly earnings and time in operation: The facts in this case are partly obtained, from the returns directly and partly from calculations upon other figures.

The average yearly earning is the figure obtained when the total amount paid as wages during the year, was divided by the average number of persons employed during the same period.

The average time or days in operation shown is the figures which were obtained when the total number of days in operation by all the establishments included is divided by the number of these establishments. Each establishment included reported in full as to the number of days it was in operation during each year.

Kind of management, etc.: Under this head is shown how many establishments in each case were under private and corporate management. It is also shown how many males and females were interested as partners in the private firms, and how many males and females were interestd as stockholders in the corporations.

These facts were obtained directly from the reports. Each establishment reported as to whether it was a private firm or corporation. Those under private management also gave the number of partners, and those under corporate management gave as near as they could the number of the stockholders. With this data at hand it was of course an easy matter to compute the facts which are shown in this part of the table.

Capital, product, wages, etc.: In this connection is presented the total amount of capital invested, the total value of the product, or goods made, the total amount amount paid as wages in

obtaining this product, and the average amount of capital and product to each worker.

Each establishment reported as to the capital, product and wages. It showed in detail the amount of capital invested, the selling value of its product each year and the amount it had paid as wages in obtaining this product. This constituted the original data and from these figures the totals for each industry or for all establishments included were computed.

The average capital and product to each worker was obtained by dividing the total amount in each case by the average number of persons employed.

The figures in all the presentations in the tables which have thus been briefly explained cover the years 1899 and 1900 respectively.

As said above this investigation is continued from year to year, and its purpose has been explained in previous reports. Briefly it may be said that this purpose is to show from year to year the condition and growth of the manufacturing industries in this state. How far this purpose is subserved may not be settled beyond dispute. Those who have to furnish the data or who take extreme individualistic views upon economic and social questions often talk as if they attached but little importance to presentations of this nature, and this in face of the fact that they are often employing such facts in support of arguments in other lines without questioning their soundness. Others again manifest a strange disregard for all statistical information. By students, the press, and the greater proportion of the public, however, facts of this kind are regarded as important and are constantly sought.

A close examination of these facts cannot fail to furnish material for important conclusions. The figures under earnings and the number of persons employed certainly throws a great deal of light upon the condition of the wage earning classes. These facts again, together with those which relate to the investment and product, reveal a great deal that is absolutely essential in judging of industrial conditions in general.

MANUFACTURERS' RETURNS.

7

MANUFACTURERS' RETURNS, 1899-1900. AGRICULTURAL IMPLEMENTS—27 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1899				1900			
	MALE.	FE-MALE	TOTAL.		MALE.	FE-MALE.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	223	.....	223	5.09	192	.....	192	5.02
\$5.00 but under \$6.00	43	.....	43	1.14	66	.....	66	1.73
6.00 but under 7.00	343	.....	343	9.93	326	.....	326	8.52
7.00 but under 8.00	576	.....	576	15.27	610	.....	610	15.95
8.00 but under 9.00	571	.....	571	15.14	610	.....	610	15.95
9.00 but under 10.00	594	.....	594	15.75	590	.....	590	15.43
10.00 but under 12.00	529	.....	529	14.02	396	.....	396	10.36
12.00 but under 15.00	584	.....	584	15.48	571	.....	571	14.93
15.00 but under 20.00	259	.....	259	6.87	363	.....	363	9.49
20.00 and over	50	.....	50	1.33	100	.....	100	2.61
Total	3,772	.....	3,772	100.00	3,824	.....	3,824	100.00

2. Number of Persons Employed, Range of Employment—by Month.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1899.	1900.	1899.	1900.	1899.	1900.
January	3,231	3,435	94.17	95.92	5.83	4.08
February	3,359	3,581	97.90	100.00	2.10	.....
March	3,431	3,570	100.00	99.69	.....	.31
April	3,357	3,202	97.84	89.43	2.16	10.57
May	3,055	2,951	89.04	82.41	10.95	17.59
June	3,114	2,827	90.76	78.84	9.24	21.06
July	2,908	2,141	85.59	59.79	14.41	40.21
August	2,913	1,734	84.90	48.42	15.10	51.58
September	2,481	1,466	72.31	40.66	27.69	59.34
October	2,412	1,626	70.30	45.41	29.70	54.59
November	2,859	1,710	83.33	47.75	16.67	52.25
December	3,186	2,563	92.57	71.57	7.43	28.43

3. Other Presentations.

CLASSIFICATION.	1899.	1900.	INCREASE OR DECREASE IN 1900.	
			Amount.	Prct.
Smallest No. of persons employed..	2,412	1,466	946	39.22
Greatest No. of persons employed ..	3,431	3,581	150	4.37
Average No. of persons employed..	3,025	2,567	458	15.14
Average yearly earnings	\$47,500	\$54,726	\$7,226	15.21
Average time in operation, days....	282	281.30	70	.25
No. of private firms	4	4	.....	.....
No. of male partners	6	6	.....	.....
No. of female partners .....	.....	.....	.....	.....
Total No. of partners	6	6	.....	.....
No. of corporations	23	23	.....	.....
No. of male stockholders	185	176	9	4.87
No. of female stockholders	47	47	.....	.....
Total No. of stockholders	232	223	9	3.88
Total No. of partners and stockholders	238	229	9	3.78
Amount of capital invested	\$12,471,417 51	\$13,726,206 07	\$1,254,788 56	10.06
Value of goods made or work done..	7,432,127 69	7,918,799 15	486,671 46	6.54
Amount paid as wages.....	1,436,922 72	1,404,829 54	32,093 18	2.23
Av. capital to each person employed	4,122 78	5,347 18	1,224 40	29.70
Av. product to each person employed	2,456 90	3,084 69	627 79	25.55

MANUFACTURERS' RETURNS, 1899-1900.

ARTISANS' TOOLS—9 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1899				1900			
	MALE.	FE-MALE.	TOTAL.		MALE.	FE-MALE.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	292	.....	292	22.29	235	.....	235	24.03
\$5.00 but under \$6.00	105	.....	105	8.02	65	.....	65	6.65
6.00 but under 7.00	133	.....	133	10.15	123	.....	123	12.58
7.00 but under 8.00	125	.....	125	9.54	91	.....	91	9.30
8.00 but under 9.00	141	.....	141	10.76	114	.....	114	11.66
9.00 but under 10.00	134	.....	134	10.23	104	.....	104	10.63
10.00 but under 12.00	122	.....	122	9.31	71	.....	71	7.26
12.00 but under 15.00	148	.....	148	11.30	93	.....	93	9.51
15.00 but under 20.00	89	.....	89	6.80	71	.....	71	7.26
20.00 and over	21	.....	21	1.60	11	.....	11	1.12
Totals	1,310	.....	1,310	100.00	978	.....	978	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1899.	1900.	1899.	1900.	1899.	1900.
January	1,143	966	91.37	100.00	8.63	.....
February	1,261	774	100.00	80.12	.....	19.88
March	1,166	585	93.21	60.56	6.79	39.44
April	939	532	75.06	55.07	4.94	44.93
May	849	533	67.87	55.18	32.13	44.82
June	815	456	65.15	47.20	34.85	52.80
July	831	462	66.43	47.83	33.57	52.17
August	851	753	68.03	77.95	31.97	22.05
September	879	762	70.28	78.88	29.74	21.12
October	950	878	75.94	90.89	24.06	9.11
November	939	869	75.06	89.96	24.94	10.04
December	1,011	947	80.82	98.03	19.18	1.97

3. Other Presentations.

CLASSIFICATION.	1899.	1900.	INCREASE OR DECREASE IN 1900.	
			Amount.	Pr. ct.
Smallest No. of persons employed..	815	456	— 359	44.05
Greatest No. of persons employed..	1,251	966	— 285	22.79
Average No. of persons employed..	969	710	— 259	26.73
Average yearly earnings.....	\$375 10	\$447 87	+ \$72 77	19.40
Average time in operation, days....	302	300	— 2	.66
No. of private firms	7	7	—	.....
No. of male partners	14	12	— 2	14.29
No. of female partners .....	.....	.....	.....	.....
Total No. of partners	14	12	— 2	14.29
No. of corporations	1	1	—	.....
No. of male stockholders	5	5	—	.....
No. of female stockholders .....	.....	.....	.....	.....
Total No. of stockholders	5	5	—	.....
Total No. of partners and stockholders	19	17	— 2	10.53
Amount of capital invested.....	\$386,957 56	\$917,897 68	+ \$530,940 12	3.49
Value of goods made and work done	1,265,868 86	1,129,261 38	— 136,607 48	10.80
Amount paid as wages	363,474 43	317,989 87	— 45,484 56	12.51
Av. capital to each person employed	916 33	1,292 81	+ 377 48	41.24
Av. product to each person employed	1,306 26	1,590 51	+ 284 25	22.53

1 establishment did not report as to kind of management and No. of partners.

MANUFACTURERS' RETURNS.

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MANUFACTURERS' RETURNS, 1899-1900. BEEF AND PORK PACKING—9 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1899				1900			
	MALE.	FE-MALE.	TOTAL.		MALE.	FE-MALE.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	79	.....	79	4.70	76	.....	76	4.23
\$5.00 but under \$6.00	14	2	16	.85	22	2	24	1.36
6.00 but under 7.00	46	1	47	2.80	190	.....	190	10.56
7.00 but under 8.00	261	1	262	15.60	495	.....	495	27.51
8.00 but under 9.00	56	.....	56	3.34	390	.....	390	21.68
9.00 but under 10.00	529	.....	529	31.51	201	.....	201	11.17
10.00 but under 12.00	801	.....	801	17.93	218	.....	218	12.12
12.00 but under 15.00	223	.....	223	13.28	103	.....	103	5.78
15.00 but under 20.00	119	.....	119	7.09	97	.....	97	5.39
20.00 and over	47	.....	47	2.80	5	.....	5	.28
Totals	1,675	4	1,679	100.00	1,797	2	1,799	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1899.	1900.	1899.	1900.	1899.	1900.
January	1,637	1,756	100.00	100.00	.....	.....
February	1,476	1,444	90.16	82.23	9.84	17.77
March	1,360	1,263	83.08	71.92	16.92	28.08
April	1,302	1,151	79.54	65.64	20.46	34.36
May	1,268	1,197	77.46	68.20	22.54	31.80
June	1,366	1,403	83.45	79.90	16.55	20.10
July	1,325	1,291	80.94	73.52	19.06	26.48
August	1,266	1,272	77.24	72.44	22.66	27.56
September	1,226	1,240	74.89	70.62	25.11	29.38
October	1,417	1,443	86.56	82.18	13.44	17.82
November	1,543	1,608	94.26	91.57	5.74	8.43
December	1,611	1,740	98.41	99.09	1.59	.91

3. Other Presentations.

CLASSIFICATION.	1899.	1900.	INCREASE OR DECREASE IN 1900.	
			Amount.	Prct.
Smallest No. of persons employed..	1,226	1,151	—	75
Greatest No. of persons employed..	1,637	1,756	+	119
Average No. of persons employed..	1,400	1,401	+	1
Average yearly earnings	\$407 00	\$429 64	+	\$22 64
Average time in operation, days....	289	282	—	7
No. of private firms	4	3	—	1
No. of male partners	20	10	—	10
No. of female partners	1	1	.....	.....
Total No. of partners	21	11	—	10
No. of corporations	5	6	+	1
No. of male stockholders	33	44	+	11
No. of female stockholders .....	.....	3	+	3
Total No. of stockholders	33	47	+	14
Total No. of partners and stockholders	54	58	+	4
Amount of capital invested.....	\$3,947,832 00	\$4,069,690 67	+	\$121,858 67
Value of goods made or work done..	13,929,994 58	15,337,168 93	+	1,407,174 35
Amount paid as wages.....	670,773 80	601,330 59	—	31,150 79
Av. capital to each person employed	2,319 88	2,904 85	+	84 97
Av. product to each person employed	9,349 99	10,947 30	+	997 31

MANUFACTURERS' RETURNS, 1899-1900.

BOOTS AND SHOES—28 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1899				1900			
	MALE.	FE-MALE.	TOTAL.		MALE.	FE-MALE.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	365	481	846	32.50	377	552	929	32.45
\$5.00 but under \$6.00	75	197	272	10.45	82	117	199	6.95
6.00 but under 7.00	131	98	229	8.80	95	104	199	6.95
7.00 but under 8.00	134	56	190	7.30	131	55	186	6.50
8.00 but under 9.00	140	40	180	6.91	142	45	187	6.54
9.00 but under 10.00	205	37	242	9.30	337	28	365	12.75
10.00 but under 12.00	228	27	255	9.80	409	34	443	15.47
12.00 but under 15.00	184	13	197	7.57	165	17	182	6.36
15.00 but under 20.00	134	1	135	5.19	124	.....	124	4.34
20.00 and over	55	2	57	2.29	48	1	49	1.72
Totals	1,651	952	2,603	100.00	1,910	953	2,863	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1899.	1900.	1899.	1900.	1899.	1900.
January	2,496	2,521	100.00	99.17	.....	.83
February	2,479	2,474	99.32	97.32	.68	2.68
March	2,472	2,542	99.04	100.00	.96	.....
April	2,452	2,382	98.24	93.71	1.76	6.29
May	2,304	2,199	92.31	86.51	7.69	13.49
June	2,333	2,372	93.47	93.31	6.53	6.69
July	2,408	2,399	96.47	94.37	3.53	5.63
August	2,421	2,435	97.00	95.79	3.00	4.21
September	2,456	2,501	98.40	98.39	1.60	1.61
October	2,470	2,401	98.96	94.41	1.04	5.59
November	2,425	2,354	97.16	92.60	2.84	7.40
December	2,405	2,389	96.36	93.98	3.64	6.02

3. Other Presentations.

CLASSIFICATION.	1899.	1900.	INCREASE OR DECREASE IN 1900.		
			Amount.	Pct.	
Smallest No. of persons employed..	2,304	2,199	—	105	4.56
Greatest No. of persons employed	2,496	2,542	+	46	1.84
Average No. of persons employed...	2,427	2,414	—	13	.53
Average yearly earnings	\$302 64	\$355 28	+	\$52 64	17.39
Average time in operation, days....	284	280	—	4	1.41
No. of private firms.....	8	7	—	1	12.50
No. of male partners.....	12	14	+	2	16.67
No. of female partners					
Total No. of partners	12	14	+	2	16.67
No. of corporations	19	20	+	1	5.26
No. of male stockholders.....	147	140	—	7	4.89
No. of female stockholders	18	20	+	2	11.11
Total No. of stockholders.....	165	160	—	5	3.03
Total No. of partners and stockholders	177	174	—	3	1.70
Amount of capital invested.....	\$2,327,632 43	\$2,353,820 38	+	\$26,187 95	1.12
Value of goods made or work done.	3,795,942 20	4,319,748 48	+	523,806 28	13.77
Amount paid as wages.....	732,694 62	857,644 76	+	124,950 14	17.06
Av. capital to each person employed	961 43	975 07	+	13 64	1.42
Av. product to each person employed	1,568 34	1,789 45	+	221 11	14.09

1 establishment did not report as to kind of management and No. of partners.

MANUFACTURERS' RETURNS.

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MANUFACTURERS' RETURNS, 1899-1900.

BOXES, PAPER-6 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1899				1900			
	MALE.	FE-MALE.	TOTAL.		MALE.	FE-MALE.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	36	220	256	57.66	34	185	219	49.32
\$5.00 but under \$6.00	8	24	32	7.20	13	25	38	8.66
6.00 but under 7.00	12	47	59	13.23	11	54	65	14.64
7.00 but under 8.00	14	17	31	6.98	8	33	41	9.23
8.00 but under 9.00	10	1	11	2.48	9	2	11	2.48
9.00 but under 10.00	19	.....	10	2.26	13	4	17	3.83
10.00 but under 12.00	13	1	14	3.15	13	1	14	3.15
12.00 but under 15.00	15	.....	15	3.38	24	.....	24	5.41
15.00 but under 20.00	11	.....	11	2.48	12	.....	12	2.70
20.00 and over	5	.....	5	1.13	3	.....	3	.68
Totals	134	310	444	100.00	140	304	444	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1899.	1900.	1899.	1900.	1899.	1900.
January	374	383	87.59	89.49	12.41	10.51
February	383	389	89.70	90.89	10.30	9.11
March	397	394	92.97	92.06	7.03	7.94
April	408	404	96.53	94.39	4.47	5.61
May	418	406	97.89	94.86	2.11	5.14
June	416	396	97.42	92.52	2.58	7.48
July	417	390	97.66	91.14	2.34	8.86
August	409	389	95.78	90.89	4.22	9.11
September	406	385	95.08	89.95	4.92	10.06
October	419	402	98.13	93.93	1.87	6.07
November	427	416	100.00	97.20	.....	2.80
December	423	428	99.06	100.00	.94	.....

3. Other Presentations.

CLASSIFICATION.	1899.	1900.	INCREASE OR DECREASE IN 1900.	
			Amount.	Pct.
Smallest No. of persons employed..	374	383	+	9 2.41
Greatest No. of persons employed..	427	428	+	1 .23
Average No. of persons employed..	408	399	-	9 2.21
Average yearly earnings.....	\$254 10	\$255 20	+	\$1 10 .43
Average time in operation, days....	298	298	.....	.....
No. of private firms.....	5	5	.....	.....
No. of male partners	8	8	.....	.....
No. of female partners	1	1	.....	.....
Total No. of partners	9	9	.....	.....
No. of corporations	1	1	.....	.....
No. of stockholders	5	5	.....	.....
No. of male stockholders	2	2	.....	.....
Total No. of stockholders	7	7	.....	.....
Total No. of partners and stockholders	16	16	.....	.....
Amount of capital invested	\$470,376 66	\$478,898 81	+	\$8,622 15 1.83
Value of goods made or work done.	682,929 44	696,932 24	+	14,002 80 2.06
Amount paid as wages	103,670 78	101,827 33	-	1,843 45 1.81
Av. capital to each person employed	1,152 88	1,200 50	+	47 62 4.13
Av. product to each person employed	1,673 85	1,746 70	+	72 85 4.35

MANUFACTURERS' RETURNS, 1899-1900.
BOXES, PACKING AND CIGARS—29 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1899				1900			
	MALE.	FE-MALE.	TOTAL.		MALE.	FE-MALE.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	356	112	468	31.62	347	122	469	30.71
\$5.00 but under \$6.00	73	33	106	7.16	87	31	118	7.73
6.00 but under 7.00	177	6	183	12.36	135	27	162	10.61
7.00 but under 8.00	234	.....	234	15.81	205	.....	205	13.42
8.00 but under 9.00	120	.....	120	8.11	129	.....	129	8.45
9.00 but under 10.00	145	.....	145	9.80	235	.....	235	15.39
10.00 but under 12.00	112	.....	112	7.57	102	.....	102	6.68
12.00 but under 15.00	59	.....	59	3.99	69	.....	69	4.52
15.00 but under 20.00	31	.....	31	2.09	27	.....	27	1.77
20.00 and over	22	.....	22	1.49	11	.....	11	.72
Totals	1,329	151	1,480	100.00	1,347	180	1,527	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1899.	1900.	1899.	1900.	1899.	1900.
January	1,194	1,206	88.91	90.95	11.09	9.05
February	1,150	1,140	85.63	85.97	14.37	14.03
March	1,110	1,232	82.65	92.91	17.35	7.09
April	1,252	1,281	93.22	96.61	6.78	3.39
May	1,313	1,308	97.84	98.64	2.16	1.36
June	1,318	1,326	98.14	100.00	1.86	.....
July	1,336	1,304	99.48	98.34	.52	1.66
August	1,333	1,279	99.26	96.46	.74	3.54
September	1,343	1,240	100.00	93.51	.....	6.49
October	1,279	1,209	95.23	91.18	4.77	8.82
November	1,238	1,208	96.65	91.10	3.35	8.90
December	1,229	1,245	91.51	93.89	8.49	6.11

3. Other Presentations.

CLASSIFICATION.	1899.	1900.	INCREASE OR DECREASE IN 1900.		
			Amount.	Pct.	
Smallest No. of persons employed..	1,110	1,140	+	30	2.70
Greatest No. of persons employed..	1,343	1,326	—	17	1.28
Average No. of persons employed..	1,263	1,248	—	15	1.19
Average yearly earnings	\$280 94	\$300 17	+	\$19 23	6.84
Average time in operation, days....	261	255	—	6	2.30
No. of private firms	16	16			
No. of male partners	29	29			
No. of female partners					
Total No. of partners.....	29	29			
No. of corporations.....	13	13			
No. of male stockholders.....	55	55			
No. of female stockholders.....					
Total No. of stockholders.....	55	55			
Total No. of partners and stockholders	84	84			
Amount of capital invested.....	\$1,343,233 30	\$1,368,715 20	+	\$25,481 90	1.90
Value of goods made or work done.	2,074,337 10	2,134,307 88	+	59,970 78	2.89
Amount paid as wages	354,826 32	374,614 99	+	19,788 67	5.58
Av. capital to each person employed	1,063 53	1,096 73	+	33 20	3.12
Av. product to each person employed	1,642 39	1,710 18	+	67 79	4.13

MANUFACTURERS' RETURNS, 1899-1900.
BRICK, TILE AND SEWER PIPE—32 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1899				1900			
	MALE.	FE-MALE.	TOTAL.		ALE.	FE-MALE.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	73	.....	73	8.81	54	2	56	6.50
\$5.00 but under \$6.00	12	.....	12	1.45	16	1	17	1.97
6.00 but under 7.00	15	.....	15	1.81	48	.....	48	5.57
7.00 but under 8.00	148	1	149	17.97	58	.....	58	6.74
8.00 but under 9.00	189	.....	189	22.80	136	.....	136	15.80
9.00 but under 10.00	293	.....	293	35.34	438	.....	438	50.87
10.00 but under 12.00	66	.....	66	7.96	80	.....	80	9.29
12.00 but under 15.00	22	.....	22	2.65	22	.....	22	2.56
15.00 but under 20.00	9	.....	9	1.09	5	.....	5	.58
20.00 and over	1	.....	1	.12	1	.....	1	.12
Totals	828	1	829	100.00	858	3	861	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1899.	1900.	1899.	1900.	1899.	1900.
January	71	118	8.93	14.27	91.07	85.73
February	78	129	9.81	15.60	90.19	84.40
March	146	149	18.24	18.02	81.76	81.98
April	281	283	35.85	34.22	64.65	65.78
May	687	722	86.42	87.30	13.58	12.70
June	766	827	96.35	100.00	3.65	.....
July	795	822	100.00	99.40	.....	.60
August	779	806	97.99	97.46	2.02	2.54
September	730	708	91.82	85.61	8.18	14.39
October	474	467	59.62	56.47	40.38	43.53
November	303	268	38.11	32.41	61.89	67.59
December	185	154	23.27	18.62	76.73	81.38

3. Other Presentations.

CLASSIFICATION.	1899.	1900.	INCREASE OR DECREASE IN 1900.	
			Amount.	Prct.
Smallest No. of persons employed..	71	118	+	47
Greatest No. of persons employed..	795	827	+	32
Average No. of persons employed..	441	454	+	13
Average yearly earnings	\$311 78	\$380 55	+	\$68 77
Average time in operation, days....	150	149	-	1
No. of private firms.....	23	22	-	1
No. of male partners.....	88	30	-	8
No. of female partners.....	1	2	+	1
Total No. of partners.....	39	32	-	7
No. of corporations.....	8	9	+	1
No. of male stockholders.....	45	52	+	7
No. of female stockholders.....	13	12	-	1
Total No. of stockholders.....	58	64	+	6
Total No. of partners and stockholders	97	96	-	1
Amount of capital invested.....	\$573,895 83	\$509,887 54	-	\$64,008 29
Value of goods made or work done.	453,230 23	492,490 50	+	34,260 27
Amount paid as wages	137,496 07	172,769 13	+	35,273 06
Av. capital to each person employed	1,301 35	1,123 10	-	178 25
Av. product to each person employed	1,039 07	1,084 78	+	45 71

1 establishment did not report as to kind of management and No. of partners.

MANUFACTURERS' RETURNS, 1899-1900.

BROOMS, ETC.—18 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1899				1900			
	MALE.	FE-MALE.	TOTAL.		MALE.	FE-MALE.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	43		43	15.09	60	5	65	22.57
\$5.00 but under \$6.00	16		16	5.61	21		21	7.30
6.00 but under 7.00	47		47	16.49	31		31	10.76
7.00 but under 8.00	65		65	22.81	26		26	9.03
8.00 but under 9.00	26		26	9.12	39		39	13.54
9.00 but under 10.00	35		35	12.28	57		57	19.79
10.00 but under 12.00	84		84	11.93	31		31	10.76
12.00 but under 15.00	16	1	17	5.97	14		14	4.86
15.00 but under 20.00	2		2	.70	3		3	1.04
20.00 and over					1		1	.35
Totals	284	1	285	100.00	283	5	288	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1899.	1900.	1899.	1900.	1899.	1900.
January	170	171	65.64	69.80	34.36	30.20
February	190	193	73.36	78.78	26.64	21.22
March	269	214	80.69	87.35	19.31	12.65
April	199	212	76.83	86.63	23.17	13.47
May	231	227	89.19	92.65	10.81	7.35
June	231	238	89.19	97.14	10.81	2.86
July	249	245	96.14	100.00	3.86	
August	259	244	100.00	99.59		.41
September	231	232	89.19	94.69	10.81	5.31
October	193	204	74.52	83.27	25.48	16.73
November	179	199	69.11	81.23	30.89	18.77
December	169	179	65.25	73.06	34.75	27.94

3. Other Presentations.

CLASSIFICATION.	1899.	1900.	INCREASE OR DECREASE IN 1900,	
			Amount.	Pct.
Smallest No. of persons employed..	169	171	+	2
Greatest No. of persons employed..	259	245	—	14
Greatest No. of persons employed..	209	213	+	4
Average yearly earnings	\$301.62	\$299.84	—	\$1.68
Average time in operation, days....	268	249	—	19
No. of private firms.....	14	14	—	
No. of male partners	29	23	—	6
No. of female partners			—	
Total No. of partners.....	29	23	—	6
No. of corporations	4	4	—	
No. of male stockholders.....	26	24	—	2
No. of female stockholders	3	5	+	2
Total No. of stockholders.....	29	29	—	
Total No. of partners and stockholders	58	52	—	6
Amount of capital invested.....	\$151,719.21	\$163,195.86	+	\$11,476.65
Value of goods made or work done.	235,934.70	245,758.25	+	9,823.55
Amount paid as wages	63,017.55	63,866.50	+	848.95
Av. capital to each person employed	721.14	766.13	+	44.99
Av. product to each person employed	1,128.87	1,153.79	+	24.92

MANUFACTURERS' RETURNS.

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MANUFACTURERS' RETURNS, 1899-1900.

BURIAL CASES-3 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1899				1900			
	MALE.	FE-MALE.	TOTAL.		MALE.	FE-MALE.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	35	62	97	27.09	50	28	78	21.73
\$5.00 but under \$6.00	9	12	21	5.87	3	37	40	11.14
6.00 but under 7.00	32	4	36	10.06	4	30	34	9.47
7.00 but under 8.00	76	.....	76	21.23	76	1	77	21.45
8.00 but under 9.00	28	.....	28	7.82	27	.....	27	7.52
9.00 but under 10.00	51	.....	51	14.25	47	.....	47	13.09
10.00 but under 12.00	15	1	16	4.47	18	1	19	5.29
12.00 but under 15.00	22	.....	22	6.14	18	.....	18	5.01
15.00 but under 20.00	11	.....	11	3.07	19	.....	19	5.30
20.00 and over .....	.....	.....	.....	.....	.....	.....	.....	.....
Totals	279	79	358	100.00	262	97	359	100.00

2. Number of Persons Employed, Range of Employment-By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF-			
			Employment.		Unemployment.	
	1899.	1900.	1899.	1900.	1899.	1900.
January	304	256	84.68	98.89	15.32	1.11
February	355	357	98.89	99.17	1.11	.83
March	356	357	99.11	99.17	.89	.83
April	356	357	99.11	99.17	.89	.83
May	357	358	99.44	99.44	.56	.56
June	357	359	99.44	99.72	.56	.28
July	357	358	99.44	99.44	.56	.56
August	357	358	99.44	99.44	.56	.56
September	358	359	99.72	99.72	.28	.28
October	358	360	99.72	100.00	.28	.....
November	359	360	100.00	100.00	.....	.....
December	359	360	100.00	100.00	.....	.....

3. Other Presentations.

CLASSIFICATION.	1899.	1900.	INCREASE OR DECREASE IN 1900.	
			Amount.	Prct.
Smallest No. of persons employed..	304	356	+	52 17.11
Greatest No. of persons employed..	359	360	+	1 .28
Average No. of persons employed..	353	358	+	5 1.13
Average yearly earnings	\$350 78	\$343 48	-	\$7 30 2.08
Average time in operation, days....	3 00	2 98	-	2 .67
No. of private firms.....	1	1	.....	.....
No. of male partners	2	2	.....	.....
No. of female partners .....	.....	.....	.....	.....
Total No. of partners.....	2	2	.....	.....
No. of corporations	2	2	.....	.....
No. of male stockholders.....	13	13	.....	.....
No. of female stockholders.....	6	7	+	1 16.67
Total No. of stockholders	19	20	+	1 5.26
Total No. of partners and stockholders	21	22	+	1 4.76
Amount of capital invested	\$597,150 00	\$582,200 00	-	\$14,950 00 2.50
Value of goods made or work done..	486,250 00	534,272 58	+	48,022 58 9.88
Amount paid as wages	123,824 00	122,966 10	-	857 90 .61
Av. capital to each person employed	1,691 64	1,626 26	-	65 38 3.86
Av. product to each person employed	1,377 48	1,492 38	+	114 90 8.34

MANUFACTURERS' RETURNS, 1899-1900.
CANNING VEGETABLES—16 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1899				1900			
	MALE.	FE-MALE.	TOTAL.		MALE.	FE-MALE.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	181	502	683	42.72	163	464	627	37.23
\$5.00 but under \$6.00	58	107	165	10.32	20	211	231	13.72
6.00 but under 7.00	43	48	91	5.69	51	48	99	5.88
7.00 but under 8.00	98	.....	98	6.13	112	8	120	7.12
8.00 but under 9.00	68	12	80	5.00	153	12	165	9.80
9.00 but under 10.00	177	21	198	12.38	248	21	269	15.97
10.00 but under 12.00	166	.....	166	10.38	113	5	118	7.01
12.00 but under 15.00	75	.....	75	4.69	31	.....	31	1.84
15.00 but under 20.00	15	.....	15	.94	5	.....	5	.80
20.00 and over	28	.....	28	1.75	19	.....	19	1.13
Totals	909	690	1,599	100.00	915	769	1,684	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1899.	1900.	1899.	1900.	1899.	1900.
January	52	46	3.65	3.18	96.35	96.82
February	56	46	3.87	3.18	96.13	96.82
March	56	51	3.94	3.52	96.06	96.48
April	95	77	6.68	5.32	93.32	94.68
May	147	115	10.33	7.94	89.67	92.06
June	758	735	53.27	50.76	46.73	49.24
July	1,423	1,448	100.00	100.00	.....	.....
August	1,393	1,425	97.89	97.72	2.11	2.28
September	840	740	59.03	51.10	40.97	48.90
October	406	424	28.53	29.28	71.47	70.72
November	282	165	19.82	11.40	80.18	88.60
December	68	56	4.78	3.87	95.22	96.13

3. Other Presentations.

CLASSIFICATION.	1899.	1900.	INCREASE OR DECREASE IN 1900.	
			Amount.	Pct.
Smallest No. of persons employed..	52	46	—	6
Greatest No. of persons employed..	1,423	1,448	+	25
Average No. of persons employed..	465	444	—	21
Average yearly earnings	\$232 88	\$247 02	+	\$14 14
Average time in operation, days....	139	129	—	10
No. of private firms	5	5	.....	.....
No. of male partners	9	9	.....	.....
No. of female partners .....	.....	.....	.....	.....
Total No. of partners	9	9	.....	.....
No. of corporations	11	11	.....	.....
No. of male stockholders	345	255	—	90
No. of female stockholders	14	13	—	1
Total No. of stockholders	359	268	—	91
Total No. of partners and stockholders	368	277	—	91
Amount of capital invested	\$632,989 73	\$666,478 01	+	\$33,488 28
Value of goods made or work done.	1,173,672 44	1,184,210 94	+	10,538 50
Amount paid as wages	108,292 15	109,678 97	+	1,386 82
Av. capital to each person employed	1,361 27	1,501 08	+	139 81
Av. product to each person employed	2,524 03	2,667 14	+	143 11

MANUFACTURERS' RETURNS.

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MANUFACTURERS' RETURNS, 1899-1900.

CEMENT, LIME AND PLASTER—12 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1899				1900			
	MALE.	FE-MALE.	TOTAL.		MALE.	FE-MALE.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	27	43	70	9.52	30	34	64	10.32
\$5.00 but under \$6.00	3	1	4	.54	8	1	9	1.45
6.00 but under 7.00	57	8	60	8.16	19	.....	19	8.07
7.00 but under 8.00	159	.....	159	21.63	167	1	168	27.10
8.00 but under 9.00	143	.....	143	19.46	32	.....	32	5.16
9.00 but under 10.00	92	.....	92	12.52	148	.....	148	23.87
10.00 but under 12.00	165	.....	165	22.45	152	.....	152	24.52
12.00 but under 15.00	28	.....	28	3.81	18	.....	18	2.90
15.00 but under 20.00	9	.....	9	1.23	8	.....	8	1.29
20.00 and over	5	.....	5	.68	2	.....	2	.32
Totals	683	47	735	100.00	584	36	620	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1899.	1900.	1899.	1900.	1899.	1900.
January	233	281	33.70	49.82	61.30	50.18
February	259	293	43.02	51.95	56.98	48.05
March	282	337	46.84	59.75	53.16	40.25
April	312	406	51.83	82.45	48.17	17.55
May	458	478	76.08	84.75	23.92	15.25
June	602	564	100.00	100.00	.....	.....
July	584	527	97.01	93.44	2.99	6.56
August	525	493	87.21	87.41	12.79	12.59
September	550	487	91.36	86.36	8.64	13.65
October	575	497	95.51	88.12	4.49	11.88
November	529	489	87.87	86.70	12.13	13.30
December	412	299	68.44	53.01	31.56	46.99

3. Other Presentations.

CLASSIFICATION.	1899.	1900.	INCREASE OR DECREASE IN 1900.		
			Amount.	Pr ct.	
Smallest No. of persons employed..	233	281	+	48	20.60
Greatest No. of persons employed..	602	564	—	38	6.31
Average No. of persons employed..	443	434	—	9	2.03
Average yearly earnings	\$364 77	\$391 33	+	\$26 56	7.28
Average time in operation, days....	258	251	—	7	2.71
No. of private firms	3	3	—	—	—
No. of male partners	4	4	—	—	—
No. of female partners	—	1	+	1	—
Total No. of partners	4	5	+	1	25.00
No. of corporations	9	9	—	—	—
No. of male stockholders	319	320	+	1	.31
No. of female stockholders	75	73	—	2	2.67
Total No. of stockholders	394	393	—	1	.25
Total No. of partners and stockholders	398	398	—	—	—
Amount of capital invested	\$1,030,190 10	\$1,110,691 20	+	\$80,501 10	7.81
Value of goods made or work done.	1,198,834 21	1,317,276 41	+	118,442 20	9.88
Amount paid as wages	161,594 60	169,836 73	+	8,242 13	5.10
Av. capital to each person employed	2,325 49	2,559 19	+	233 70	10.05
Av. product to each person employed	2,706 17	3,035 20	+	329 03	12.16

MANUFACTURERS' RETURNS, 1899-1900.

CIGARS—48 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1899				1900			
	MALE.	FE. MALE.	TOTAL.		MALE.	FE. MALE.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	94	113	207	26.00	87	159	246	28.54
5.00 but under \$6.00	11	23	34	4.27	11	21	32	3.72
6.00 but under 7.00	33	20	53	6.65	36	6	42	4.87
7.00 but under 8.00	24	8	32	4.02	52	12	64	7.42
8.00 but under 9.00	48	19	67	8.42	76	17	93	10.79
9.00 but under 10.00	90	7	97	12.19	79	2	81	9.39
10.00 but under 12.00	130	9	139	17.46	108	3	111	12.88
12.00 but under 15.00	102	2	104	13.07	113	.....	113	13.11
15.00 but under 20.00	49	.....	49	6.16	62	.....	62	7.19
20.00 and over	14	.....	14	1.76	18	.....	18	2.09
Totals	595	201	796	100.00	642	220	862	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1899.	1900.	1899.	1900.	1899.	1900.
January	707	773	91.70	94.38	830	5.62
February	709	753	91.96	91.98	8.04	8.02
March	722	793	93.64	96.83	6.36	3.17
April	732	794	94.94	96.95	5.06	3.06
May	732	812	94.94	99.15	5.06	0.85
June	744	782	96.49	95.48	3.51	4.52
July	716	765	92.87	93.41	7.13	6.59
August	733	790	95.07	96.46	4.93	3.54
September	747	803	96.89	98.05	3.11	1.95
October	752	803	97.54	98.05	2.46	1.95
November	769	819	99.74	100.00	.26	.....
December	771	783	100.00	96.60	.....	4.40

3. Other Presentations.

CLASSIFICATION.	1899.	1900.	INCREASE OR DECREASE IN 1900.	
			Amount.	Pct.
Smallest No. of persons employed..	707	753	+	46 6.51
Greatest No. of persons employed..	771	819	+	48 6.23
Average No. of persons employed..	736	789	+	53 7.20
Average yearly earnings	\$367 32	\$369 07	+	\$1 75 .48
Average time in operation, days....	292	286	-	6 2.06
No. of private firms	46	47	+	1 2.17
No. of male partners	65	61	-	4 6.15
No. of female partners	2	2	-	.....
Total No. of partners	67	63	-	4 5.97
No. of corporations	2	1	-	1 50.00
No. of male stockholders	11	6	-	5 45.45
No. of female stockholders .....	.....	.....	.....	.....
Total No. of stockholders	11	6	-	5 45.45
Total No. of partners and stockholders	78	69	-	9 11.54
Amount of capital invested	\$636,684 57	\$608,601 72	-	\$28,082 85 4.41
Value of goods made or work done.	1,070,025 05	1,115,297 32	+	45,272 27 4.23
Amount paid as wages	270,348 21	291,198 97	+	20,850 76 7.71
Av. capital to each person employed	865 06	758 68	-	106 38 12.29
Av. product to each person employed	1,453 84	1,413 56	-	40 28 2.77

MANUFACTURERS' RETURNS.

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MANUFACTURERS' RETURNS, 1899-1900.

CHAIRS—12 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1899				1900			
	MALE.	FE-MALE.	TOTAL.		MALE.	FE-MALE.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	423	253	676	18.21	375	224	599	15.61
\$5.00 but under \$6.00	215	45	260	6.99	212	48	260	6.80
6.00 but under 7.00	1,449	2	1,451	39.02	1,106	3	1,109	29.01
7.00 but under 8.00	660	.....	660	17.75	759	.....	759	19.85
8.00 but under 9.00	181	.....	181	4.86	322	.....	322	8.42
9.00 but under 10.00	170	.....	170	4.57	336	.....	336	8.79
10.00 but under 12.00	184	.....	184	4.94	195	.....	195	5.10
12.00 but under 15.00	79	.....	79	2.13	140	.....	140	3.66
15.00 but under 20.00	44	.....	44	1.18	76	.....	76	1.99
20.00 and over	13	.....	13	.35	27	.....	27	.71
Totals	3,418	300	3,718	100.00	3,548	275	3,823	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
			1899.	1900.	1899.	1900.
January	3,378	3,299	98.25	89.11	1.75	10.89
February	3,438	3,391	100.00	81.06	.....	8.94
March	2,951	3,570	85.83	96.43	14.17	3.57
April	3,057	3,608	88.92	97.49	11.08	2.51
May	3,023	3,668	87.92	99.08	12.08	.92
June	2,951	3,557	85.83	96.35	14.17	3.65
July	3,051	3,372	88.74	91.09	11.26	8.91
August	3,121	3,537	90.78	95.54	9.22	4.46
September	3,063	3,619	89.09	97.75	10.91	2.25
October	3,336	3,702	97.03	100.00	2.97	.....
November	3,413	3,667	99.22	99.05	.78	.95
December	3,341	3,349	97.41	90.46	2.59	9.54

3. Other Presentations.

CLASSIFICATION.	1899.	1900.	INCREASE OR DECREASE IN 1900.	
			Amount.	Prct.
Smallest No. of persons employed..	2,951	3,299	+	348 11.79
Greatest No. of persons employed ..	3,438	3,702	+	264 7.68
Average No. of persons employed..	3,177	3,529	+	352 11.08
Average yearly earnings	\$310 60	\$324 29	+	\$13 69 4.41
Average time in operation, days....	281	278	—	3 1.07
No. of private firms	2	3	+	1 50.00
No. of male partners	3	3	.....	.....
No. of female partners .....	.....	1	+	1
Total No. of partners	3	4	+	1 33.33
No. of corporations	10	9	—	1 10.00
No. of male stockholders	147	126	—	21 14.28
No. of female stockholders	18	10	—	8 44.44
Total No. of stockholders	165	136	—	29 17.57
Total No. of partners and stockholders ..	168	140	—	28 16.67
Amount of capital invested	\$3,264,848 88	\$3,362,286 48	+	\$97,437 60 2.98
Value of goods made and work done ..	2,370,132 59	3,859,994 80	+	1,489,862 21 62.86
Amount paid as wages.....	986,802 09	1,144,425 30	+	157,623 21 15.93
Av. capital to each person employed ..	1,027 65	952 76	—	74 89 7.29
Av. product to each person employed ..	746 03	1,076 79	+	330 76 44.33

MANUFACTURERS' RETURNS, 1899-1900.

CLOTHING—29 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1899				1900			
	MALE.	FE-MALE.	TOTAL.		MALE.	FE-MALE.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	43	1,110	1,153	86.80	57	1,124	1,181	87.83
\$5.00 but under \$6.00	19	888	907	28.95	16	814	830	26.59
6.00 but under 7.00	18	229	247	7.89	23	289	312	9.99
7.00 but under 8.00	51	178	229	7.31	84	150	184	5.89
8.00 but under 9.00	34	95	129	4.12	44	77	121	3.88
9.00 but under 10.00	26	42	68	2.18	54	52	106	3.39
10.00 but under 12.00	105	42	147	4.69	96	29	125	4.01
12.00 but under 15.00	80	5	85	2.72	93	11	104	3.33
15.00 but under 20.00	65	.....	65	2.08	76	.....	76	2.43
20.00 and over	102	.....	103	3.29	83	.....	83	2.66
Totals	543	2,590	3,133	100.00	578	2,546	3,122	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
			1899.	1900.	1899.	1900.
January	2,592	2,966	86.20	94.08	13.20	5.92
February	2,642	3,028	87.86	96.37	12.14	3.63
March	2,747	3,107	91.35	98.88	8.65	1.12
April	2,761	3,103	91.49	98.57	8.51	1.43
May	2,785	3,077	92.62	97.93	7.38	2.07
June	2,781	3,067	92.48	97.61	7.52	2.39
July	2,871	3,065	95.48	98.50	4.52	1.50
August	2,889	3,060	96.07	97.07	3.93	2.93
September	2,960	3,132	98.10	99.68	1.90	.32
October	3,007	3,142	100.00	100.00	.....	.....
November	2,976	3,068	98.97	97.32	1.03	2.68
December	2,969	2,913	98.40	92.71	1.60	7.29

3. Other Presentations.

CLASSIFICATION.	1899.	1900.	INCREASE OR DECREASE IN 1900.		
			Amount.	Pct.	
Smallest No. of persons employed..	2,592	2,913	+	321	12.85
Greatest No. of persons employed..	3,007	3,142	+	135	4.49
Average No. of persons employed..	2,829	3,061	+	232	8.20
Average yearly earnings	\$341 60	\$327 40	-	\$14 20	4.16
Average time in operation, days....	296	290	-	6	2.03
No. of private firms.....	10	9	-	1	10.00
No. of male partners	24	22	-	2	8.33
No. of female partners	1	.....	-	1	100.00
Total No. of partners	25	22	-	3	12.00
No. of corporations	19	20	+	1	5.26
No. of male stockholders	139	137	-	2	1.44
No. of female stockholders	61	67	+	6	9.84
Total No. of stockholders	200	204	+	4	2.00
Total No. of partners and stockholders	225	226	+	1	.44
Amount of capital invested.....	\$2,415,091 51	\$2,463,035 47	+	\$47,943 96	1.99
Value of goods made and work done	5,609,780 36	5,416,803 79	-	192,976 57	3.44
Amount paid as wages	966,393 94	997,536 58	+	31,152 64	3.22
Av. capital to each person employed	853 69	804 65	-	49 04	5.74
Av. product to each person employed	1,982 95	1,769 32	-	213 63	10.77

MANUFACTURERS' RETURNS, 1899-1900.
COOKING AND HEATING APPARATUS—5 ESTABLISHMENTS.
1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1899				1900			
	MALE.	FE-MALE.	TOTAL.		MALE.	FE-MALE.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	270	3	273	23.16	150	.....	150	13.97
\$5.00 but under \$6.00	53	.....	53	4.49	28	.....	28	2.61
6.00 but under 7.00	40	.....	40	3.39	57	.....	57	5.31
7.00 but under 8.00	56	.....	56	4.75	53	.....	53	4.93
8.00 but under 9.00	131	.....	131	11.11	142	.....	142	13.22
9.00 but under 10.00	143	.....	143	12.13	143	.....	143	13.31
10.00 but under 12.00	98	.....	98	8.31	102	.....	102	9.50
12.00 but under 15.00	184	.....	184	15.61	175	.....	175	16.30
15.00 but under 20.00	164	.....	164	13.91	177	.....	177	16.48
20.00 and over	37	.....	37	3.14	47	.....	47	4.37
Totals	1,176	3	1,179	100.00	1,074	.....	1,074	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1899.	1900.	1899.	1900.	1899.	1900.
January	830	944	71.92	53.00	28.08	47.00
February	923	976	79.98	54.80	20.02	45.20
March	975	1,028	84.49	57.72	15.51	42.28
April	1,015	1,047	87.96	58.79	12.04	41.21
May	1,052	1,045	91.16	58.67	8.84	41.33
June	1,055	996	91.42	55.92	8.58	44.08
July	1,128	977	97.75	54.86	2.25	45.14
August	1,142	970	88.96	54.46	1.04	45.54
September	1,154	985	100.00	55.36	.....	44.64
October	1,146	1,001	99.30	56.20	.70	43.80
November	1,113	1,781	96.45	100.00	3.55	.....
December	1,002	930	86.83	52.22	13.17	47.78

3. Other Presentations.

CLASSIFICATION.	1899.	1900.	INCREASE OR DECREASE IN 1900.	
			Amount.	Prct.
Smallest No. of persons employed..	830	930	+	100
Greatest No. of persons employed..	1,154	1,781	+	627
Average No. of persons employed..	1,045	1,057	+	12
Average yearly earnings	\$468 58	\$470 62	+	204
Average time in operation, days....	292	286	+	6
No. of private firms	3	3	.....	.....
No. of male partners	7	7	.....	.....
No. of female partners .....	.....	.....	.....	.....
Total No. of Partners	7	7	.....	.....
No. of corporations	2	2	.....	.....
No. of male stockholders	8	8	.....	.....
No. of female stockholders .....	.....	1	.....	100.00
Total No. of stockholders	8	9	+	1
Total No. of partners and stockholders ..	15	16	+	1
Amount of capital invested	\$980,043 71	\$980,874 53	+	\$830 82
Value of goods made or work done.	1,641,896 86	1,680,715 39	+	\$38,818 53
Amount paid as wages	489,668 73	497,444 94	+	7,776 21
Av. capital to each person employed	937 84	927 98	-	19 86
Av. product to each person employed	1,571 19	1,590 08	+	18 89

MANUFACTURERS' RETURNS, 1899-1900.

CONFECTIONERY—13 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1899				1900			
	MALE.	FE-MALE.	TOTAL.		MALE.	FE-MALE.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	207	804	1,011	75.56	210	887	1,090	71.25
\$5.00 but under \$6.00	31	18	49	3.67	31	44	75	4.91
6.00 but under 7.00	25	8	33	2.47	40	11	51	3.33
7.00 but under 8.00	35	4	39	2.91	41	3	44	2.88
8.00 but under 9.00	31	.....	31	2.32	36	4	40	2.61
9.00 but under 10.00	39	.....	39	2.91	41	1	42	2.74
10.00 but under 12.00	42	.....	42	3.14	70	.....	70	4.57
12.00 but under 15.00	54	.....	54	4.03	62	.....	62	4.05
15.00 but under 20.00	30	.....	30	2.24	41	.....	41	2.68
20.00 and over	10	.....	10	.75	15	.....	15	.98
Totals	504	834	1,338	100.00	587	943	1,530	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1899.	1900.	1899.	1900.	1899.	1900.
January	879	1,128	67.20	73.78	32.80	26.22
February	940	1,128	71.87	73.78	28.13	26.22
March	963	1,111	73.63	72.66	26.37	27.34
April	993	1,222	75.92	79.22	24.08	20.78
May	1,059	1,288	80.96	84.20	19.04	15.80
June	1,038	1,302	79.36	85.16	20.64	14.84
July	1,011	1,318	77.29	85.55	22.71	14.45
August	1,114	1,328	85.17	86.85	14.83	13.15
September	1,158	1,371	88.52	89.66	11.48	10.34
October	1,207	1,496	92.29	97.78	7.71	2.22
November	1,308	1,529	100.00	100.00	.....	.....
December	1,247	1,460	95.34	94.83	4.66	5.17

3. Other Presentations.

CLASSIFICATION.	1899.	1900.	INCREASE OR DECREASE IN 1900.	
			Amount.	Pct.
Smallest No. of persons employed..	879	1,111	+	232
Greatest No. of persons employed..	1,308	1,529	+	221
Average No. of persons employed..	1,076	1,306	+	230
Average yearly earnings	\$232 83	\$249 48	+	\$10 65
Average time in operation, days....	295	295	.....	.....
No. of private firms	2	2	.....	.....
No. of male partners	2	2	.....	.....
No. of female partners .....	.....	.....	.....	.....
Total No. of partners	2	2	.....	.....
No. of corporations	7	7	.....	.....
No. of male stockholders	31	31	.....	.....
No. of female stockholders	6	6	.....	.....
Total No. of stockholders	37	37	.....	.....
Total No. of partners and stockholders	39	39	.....	.....
Amount of capital invested	\$1,052,181 68	\$1,193,520 83	+	\$141,339 25
Value of goods made or work done.	2,012,263 29	2,215,763 30	+	203,490 01
Amount paid as wages	250,528 79	317,791 04	+	67,262 25
Av. capital to each person employed	977 86	913 87	-	63 99
Av. product to each person employed	1,870 13	1,696 60	-	173 53

1 establishment did not report as to kind of management and No. of partners.

MANUFACTURERS' RETURNS, 1899-1900.

COOPERAGE—17 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1899				1900			
	MALE.	FE-MALE.	TOTAL.		MALE.	FE-MALE.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	12	.....	12	2.55	34	.....	34	7.19
\$5.00 but under \$6.00	29	.....	29	6.16	12	.....	12	2.54
6.00 but under 7.00	22	.....	22	4.67	24	.....	24	5.07
7.00 but under 8.00	43	.....	43	9.13	41	.....	41	8.67
8.00 but under 9.00	71	.....	71	15.07	53	.....	53	11.21
9.00 but under 10.00	123	.....	123	26.11	119	.....	119	25.16
10.00 but under 12.00	77	.....	77	16.35	36	.....	36	7.61
12.00 but under 15.00	40	.....	40	8.49	81	.....	81	17.12
15.00 but under 20.00	50	.....	50	10.62	72	.....	72	15.23
20.00 and over	4	.....	4	.85	1	.....	1	.21
Total	471	.....	471	100.00	473	.....	473	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1899.	1900.	1899.	1900.	1899.	1900.
January	380	377	85.97	77.73	14.03	22.27
February	376	378	85.07	77.94	14.93	22.06
March	401	407	90.72	84.33	9.28	15.67
April	437	396	88.87	81.63	1.13	18.37
May	442	397	100.00	81.86	.....	18.14
June	425	395	96.15	81.48	3.85	18.52
July	426	402	96.38	82.89	3.62	17.11
August	436	485	98.64	100.00	1.36	.....
September	408	404	92.31	83.29	7.69	16.71
October	421	410	96.25	84.54	4.75	15.46
November	419	386	94.80	79.69	5.20	20.41
December	403	391	91.18	80.62	8.82	19.38

3. Other Presentations.

CLASSIFICATION.	1899.	1900.	INCREASE OR DECREASE IN 1900.	
			Amount.	Per ct.
Smallest No. of persons employed..	376	377	+	1 .27
Greatest No. of persons employed..	442	485	+	43 9.73
Average No. of persons employed..	415	394	-	21 5.06
Average yearly earnings	\$385 00	\$412 60	+	\$27 60 7.17
Average time in operation, days....	268	286	.....	.....
No. of private firms	13	13	.....	.....
No. of male partners	14	14	.....	.....
No. of female partners .....	.....	.....	.....	.....
Total No. of partners	14	14	.....	.....
No. of corporations	4	4	.....	.....
No. of male stockholders	35	34	-	1 2.86
No. of female stockholders	1	1	.....	.....
Total No. of stockholders.....	36	35	-	1 2.78
Total No. of partners and stockholders	50	49	-	1 2.00
Amount of capital invested	\$420,640 30	\$442,008 35	+	\$21,368 05 5.06
Value of goods made or work done.	680,870 12	682,388 43	+	1,518 31 .22
Amount paid as wages	159,778 00	162,967 67	+	3,189 67 1.97
Av. capital to each person employed	1,013 59	1,121 85	+	108 28 10.68
Av. product to each person employed	1,640 65	1,731 95	+	91 30 5.56

MANUFACTURERS' RETURNS, 1899-1900.
COTTON AND LINEN GOODS—6 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1899				1900			
	MALE.	FE-MALE.	TOTAL.		MALE.	FE-MALE.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	67	178	245	50.20	80	170	250	49.80
\$5.00 but under \$6.00	32	46	78	15.98	34	55	89	17.72
6.00 but under 7.00	17	41	58	11.88	24	37	61	12.15
7.00 but under 8.00	21	14	35	7.17	25	13	38	7.72
8.00 but under 9.00	13	5	18	3.68	22	2	24	4.75
9.00 but under 10.00	16	.....	16	3.28	7	1	8	1.54
10.00 but under 12.00	13	1	14	2.90	20	.....	20	3.98
12.00 but under 15.00	15	.....	15	3.07	7	.....	7	1.35
15.00 but under 20.00	8	.....	8	1.64	5	.....	5	.99
20.00 and over	1	.....	1	.20	.....	.....	.....	.....
Totals	203	285	488	100.00	224	278	502	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1899.	1900.	1899.	1900.	1899.	1900.
January	464	440	97.27	94.62	2.73	5.38
February	468	449	98.11	96.56	1.89	3.44
March	472	404	98.95	86.88	1.05	13.12
April	470	465	98.53	100.00	1.47	.....
May	468	461	98.11	99.14	1.89	.86
June	467	443	97.90	95.27	2.10	4.73
July	464	464	97.27	99.78	2.73	.22
August	466	430	97.69	92.47	2.31	7.53
September	466	442	97.69	95.06	2.31	4.95
October	471	434	98.74	93.33	1.26	6.67
November	474	443	99.37	95.27	.63	4.73
December	477	440	100.00	94.62	.....	5.38

3. Other Presentations.

CLASSIFICATION.	1899.	1900.	INCREASE OR DECREASE IN 1900.		
			Amount.	Pct.	
Smallest No. of persons employed..	464	404	—	60	12.93
Greatest No. of persons employed..	477	465	—	12	2.52
Average No. of persons employed..	469	443	—	26	5.54
Average yearly earnings	\$245 89	\$268 55	+	\$22 66	9.22
Average time in operation, days....	300	291	—	9	3.00
No. of private firms	3	3	.....	.....	.....
No. of male partners	22	23	+	1	4.54
No. of female partners	2	3	+	1	50.00
Total No. of partners	24	26	+	2	8.33
No. of corporations	3	3	.....	.....	.....
No. of male stockholders	124	113	—	11	8.87
No. of female stockholders	50	54	+	4	8.00
Total No. of stockholders	174	167	—	7	4.02
Total No. of partners and stockholders	193	193	—	5	2.53
Amount of capital invested	\$757,047 44	\$757,900 52	+	\$853 08	.11
Value of goods made or work done.	667,928 34	682,495 77	+	14,567 43	2.18
Amount paid as wages	115,323 48	118,969 05	+	3,645 57	3.16
Av. capital to each person employed	1,614 17	1,710 83	+	96 66	5.99
Av. product to each person employed	1,424 15	1,540 62	+	116 47	8.18

MANUFACTURERS' RETURNS.

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MANUFACTURERS' RETURNS, 1899-1900. ELECTRIC AND GAS SUPPLIES—24 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1899				1900			
	MALE.	FE-MALE.	TOTAL.		MALE.	FE-MALE.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	248	100	348	21.46	248	100	348	21.78
\$5.00 but under \$6.00	82	17	99	6.10	82	18	100	6.26
6.00 but under 7.00	76	10	86	5.24	61	11	72	4.51
7.00 but under 8.00	112	10	122	7.52	97	1	98	6.13
8.00 but under 9.00	109	2	111	6.84	123	2	125	7.82
9.00 but under 10.00	223	2	230	14.18	228	2	230	14.39
10.00 but under 12.00	187	1	188	11.47	192	1	193	12.08
12.00 but under 15.00	250	.....	250	15.42	251	.....	251	15.71
15.00 but under 20.00	150	.....	150	9.26	133	.....	133	8.32
\$20.00 and over	39	.....	39	2.41	48	.....	48	3.00
Totals	1,480	142	1,622	100.00	1,463	135	1,598	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1899.	1900.	1899.	1900.	1899.	1900.
January	1,379	1,436	95.83	98.76	4.17	1.24
February	1,388	1,442	96.46	99.24	3.54	.76
March	1,416	1,454	98.40	100.00	1.60	.....
April	1,421	1,453	98.75	99.93	1.25	.07
May	1,439	1,412	100.00	97.11	.....	2.89
June	1,307	1,278	90.83	87.98	9.17	12.02
July	1,317	1,200	91.52	82.53	8.48	17.47
August	1,276	1,151	88.67	79.16	11.33	20.84
September	1,283	1,190	89.16	81.84	10.84	18.16
October	1,338	1,223	92.98	84.11	7.02	15.89
November	1,367	1,254	94.99	86.25	5.01	13.75
December	1,424	1,290	98.89	88.72	1.11	11.28

3. Other Presentations.

CLASSIFICATION.	1899.	1900.	INCREASE OR DECREASE IN 1900.	
			Amount.	Pr. ct.
Smallest No. of persons employed..	1,276	1,151	125	9.73
Greatest No. of persons employed..	1,439	1,463	14	.97
Average No. of persons employed..	1,363	1,315	48	3.52
Average yearly earnings	\$482 24	\$482 66	\$19 58	4.06
Average time in operation, days....	299	297	2	.67
No. of private firms	9	9	.....	.....
No. of male partners	16	15	1	6.25
No. of female partners .....	.....	.....	.....	.....
Total No. of partners	16	15	1	6.25
No. of corporations	15	15	.....	.....
No. of male stockholders.....	120	133	13	10.83
No. of female stockholders.....	25	12	13	52.00
Total No. of stockholders	145	145	.....	.....
Total No. of partners and stockholders	161	160	1	.62
Amount of capital invested	\$2,602,954 09	\$2,620,464 10	\$17,510 01	.67
Value of goods made and work done	3,407,276 35	3,161,692 04	245,584 31	7.21
Amount paid as wages	657,299 58	608,294 46	48,905 12	7.44
Av. capital to each person employed	1,909 72	1,992 75	83 03	4.35
Av. product to each person employed	2,499 84	2,404 33	95 51	3.82

MANUFACTURERS' RETURNS, 1899-1900.

FLOUR AND FEED—70 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1899				1900			
	MALE.	FE-MALE.	TOTAL.		MALE.	FE-MALE.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	18	23	41	4.08	11	1	12	1.43
\$5.00 but under \$6.00	6	.....	6	.60	9	.....	9	1.07
6.00 but under 7.00	56	2	58	5.76	40	1	41	4.89
7.00 but under 8.00	61	3	64	6.36	122	.....	122	14.56
8.00 but under 9.00	99	.....	99	9.84	111	.....	111	13.25
9.00 but under 10.00	178	.....	178	17.69	156	.....	156	18.62
10.00 but under 12.00	341	.....	341	33.90	208	.....	208	24.82
12.00 but under 15.00	81	.....	81	8.06	102	.....	102	12.17
15.00 but under 20.00	97	.....	97	9.64	63	.....	63	7.52
20.00 and over	41	.....	41	4.08	14	.....	14	1.67
Total	978	28	1,006	100.00	836	2	838	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
	1899.	1900.	Employment.		Unemployment.	
			1899.	1900.	1899.	1900.
January	678	696	71.29	90.34	28.71	9.61
February	678	683	71.29	88.70	28.71	11.30
March	677	670	71.19	87.01	28.81	12.99
April	668	672	70.24	87.27	29.76	12.73
May	922	733	96.96	96.19	3.06	4.81
June	914	714	96.11	92.73	3.89	7.27
July	924	727	97.16	94.42	2.84	5.58
August	926	753	97.37	97.79	2.63	2.21
September	951	752	100.00	97.68	.....	2.34
October	854	757	89.80	98.31	10.20	1.69
November	861	770	90.54	100.00	9.46	.....
December	756	757	79.50	98.31	20.50	1.69

3. Other Presentations.

CLASSIFICATION.	1899.	1900.	INCREASE OR DECREASE IN 1900.		
			Amount	Pct.	
Smallest No. of persons employed..	677	670	—	7	1.03
Greatest No. of persons employed..	961	770	—	181	19.03
Average No. of persons employed..	817	724	—	93	11.38
Average yearly earnings	\$635 66	\$601 64	—	\$34 02	5.35
Average time in operation, days....	282	272	—	10	3.55
No. of private firms.....	45	44	—	1	2.22
No. of male partners	71	70	—	1	1.41
No. of female partners	5	6	+	1	20.00
Total No. of partners	76	76	.....	.....	.....
No. of corporations	23	24	+	1	4.35
No. of male stockholders	157	136	—	21	13.38
No. of female stockholders	30	27	—	3	10.00
Total No. of stockholders	187	163	—	24	12.84
Total No. of partners and stockholders	263	239	—	24	9.12
Amount of capital invested.....	\$6,441,675 83	\$5,705,074 49	—	\$736,601 34	11.43
Value of goods made or work done	15,470,799 85	12,820,019 78	—	2,650,780 07	17.13
Amount paid as wages	519,531 52	436,588 84	—	\$83,942 68	16.15
Av. capital to each person employed	7,884 55	7,879 94	—	4 61	.06
Av. product to each person employed	18,936 11	17,707 21	—	1,228 90	6.49

2 establishments did not report as to kind of management and No. of partners.

MANUFACTURERS' RETURNS.

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MANUFACTURERS' RETURNS, 1899-1900. FURS, GLOVES AND MITTENS—11 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1899				1900			
	MALE.	FE-MALE.	TOTAL.		MALE.	FE-MALE.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	8	120	128	38.55	14	137	151	42.54
\$5.00 but under \$6.00	6	53	59	17.77	9	39	48	13.52
6.00 but under 7.00	15	24	39	11.75	12	20	32	9.02
7.00 but under 8.00	13	10	23	6.83	11	12	23	6.48
8.00 but under 9.00	6	5	11	3.31	10	8	18	5.07
9.00 but under 10.00	10	4	14	4.22	20	6	26	7.32
10.00 but under 12.00	17*	6	23	6.93	15	5	20	5.63
12.00 but under 15.00	17	2	19	5.72	24	1	25	7.04
15.00 but under 20.00	12	.....	12	3.61	10	.....	10	2.82
20.00 and over	4	.....	4	1.21	2	.....	2	.56
Totals	108	224	332	100.00	127	228	355	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1899.	1900.	1899.	1900.	1899.	1900.
January	194	217	64.45	66.56	35.55	33.44
February	221	236	73.42	72.39	26.58	27.61
March	232	243	77.08	74.54	22.92	25.46
April	241	253	80.07	77.61	19.93	22.39
May	255	261	84.72	80.06	15.28	19.94
June	260	258	86.38	79.14	13.62	20.86
July	266	272	88.37	83.44	11.63	16.56
August	287	297	95.35	91.10	4.65	8.90
September	285	309	94.68	94.78	5.32	5.22
October	289	311	96.01	95.40	3.99	4.60
November	301	326	100.00	100.00	.....	.....
December	251	260	83.35	79.75	16.65	20.25

3. Other Presentations.

CLASSIFICATION.	1899.	1900.	INCREASE OR DECREASE IN 1900.		
			Amount.	Per cent.	
Smallest No. of persons employed..	194	217	+	23	11.86
Greatest No. of persons employed..	301	326	+	25	8.31
Average No. of persons employed..	257	270	+	13	5.06
Average yearly earnings	\$312 68	\$339 84	+	\$27 16	8.69
Average time in operation, days....	299	293	-	6	2.01
No. of private firms	9	9			
No. of male partners	17	17			
No. of female partners					
Total No. of partners	17	17			
No. of corporations	2	2			
No. of male stockholders	8	8			
No. of female stockholders					
Total No. of stockholders	8	8			
Total No. of partners and stockholders	25	25			
Amount of capital invested.....	\$274,647 73	\$285,333 86	+	\$10,686 13	3.89
Value of goods made or work done.	492,135 54	507,221 37	+	15,085 83	3.07
Amount paid as wages	80,359 81	91,757 91	+	11,398 10	14.18
Av. capital to each person employed	1,068 67	1,056 79	-	11 88	1.11
Av. product to each person employed	1,914 92	1,878 66	-	36 26	1.90

MANUFACTURERS' RETURNS, 1899-1900.

FURNITURE—44 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1899				1900			
	MALE.	FE-MALE.	TOTAL.		MALE.	FE-MALE.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	439	37	476	14.56	419	15	434	17.06
\$5.00 but under \$6.00	159	27	186	5.69	132	15	147	5.78
6.00 but under 7.00	685	5	690	21.10	.....	23	.....	.....
7.00 but under 8.00	485	7	492	15.05	610	3	613	24.10
8.00 but under 9.00	431	3	434	13.27	364	.....	364	14.31
9.00 but under 10.00	319	1	320	9.79	415	1	416	16.85
10.00 but under 12.00	302	.....	302	9.23	258	.....	258	10.14
12.00 but under 15.00	280	.....	280	8.56	218	1	219	8.61
15.00 but under 20.00	76	.....	76	2.32	66	.....	66	2.59
20.00 and over	14	.....	14	.43	4	.....	4	.16
Totals	3,190	80	3,270	100.00	2,486	58	2,544	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment	
	1899.	1900.	1899.	1900.	1899.	1900.
January	2,765	2,892	91.34	96.98	8.66	3.02
February	2,870	2,937	94.81	98.49	5.19	1.51
March	2,962	2,965	97.85	99.43	2.15	.57
April	2,937	2,982	97.03	100.00	2.97	.....
May	3,027	2,910	100.00	97.59	.....	2.41
June	2,886	2,810	95.34	94.23	4.66	5.77
July	2,914	2,381	96.27	79.85	3.73	20.15
August	2,945	2,762	97.29	92.62	2.71	7.38
September	2,978	2,820	98.38	94.57	1.62	5.43
October	2,987	2,814	98.68	94.37	1.32	5.65
November	3,002	2,770	99.17	92.89	.83	7.11
December	2,917	2,531	96.37	84.88	3.63	15.12

3. Other Presentations.

CLASSIFICATION.	1899.	1900.	INCREASE OR DECREASE IN 1900.		
			Amount.	Pr ct.	
Smallest No. of persons employed..	2,765	2,381	—	384	13.89
Greatest No. of persons employed..	3,027	2,982	—	45	1.49
Average No. of persons employed..	2,933	2,798	—	135	4.60
Average yearly earnings	\$322 42	\$343 23	+	\$20 81	6.45
Average time in operation, days....	290	286	—	4	1.38
No. of private firms.....	16	15	—	1	6.25
No. of male partners	36	30	—	6	16.67
No. of female partners .....	.....	2	+	2	.....
Total No. of partners	36	32	—	4	11.11
No. of corporations	28	29	+	1	3.57
No. of male stockholders	373	381	+	8	2.14
No. of female stockholders	36	37	+	1	2.78
Total No. of stockholders	409	418	+	9	2.20
Total No. of partners and stockholders	449	450	+	1	.22
Amount of capital invested.....	\$3,061,319 44	\$3,068,970 16	+	\$7,650 72	.25
Value of goods made or work done	3,743,969 86	3,804,121 76	+	60,151 90	1.61
Amount paid as wages	915,653 63	960,365 81	+	14,712 18	1.56
Av. capital to each person employed	1,046 26	1,086 84	+	50 58	4.83
Av. product to each person employed	1,276 50	1,359 59	+	83 09	6.51

MANUFACTURERS' RETURNS.

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MANUFACTURERS' RETURNS, 1899-1900.

IRON, MALLEABLE—23 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1899				1900			
	MALE.	FE-MALE.	TOTAL.		MALE.	FE-MALE.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	276	7	283	5.76	305	6	311	6.35
\$5.00 but under \$6.00	149	3	152	3.09	129	.....	129	2.63
6.00 but under 7.00	194	6	200	4.07	233	.....	233	4.76
7.00 but under 8.00	279	19	298	6.06	538	.....	538	10.99
8.00 but under 9.00	1,252	.....	1,252	25.43	1,109	.....	1,109	22.65
9.00 but under 10.00	506	.....	506	10.29	487	.....	487	9.95
10.00 but under 12.00	649	8	657	13.57	317	.....	317	16.69
12.00 but under 15.00	800	.....	800	16.28	621	.....	621	12.68
15.00 but under 20.00	552	.....	552	11.23	339	.....	339	6.92
20.00 and over	214	.....	214	4.35	312	.....	312	6.38
Totals	4,871	43	4,914	100.00	4,890	6	4,896	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1899.	1900.	1899.	1900.	1899.	1900.
January	4,123	4,577	88.98	100.00	11.02	.....
February	4,244	4,435	81.37	96.89	8.63	3.21
March	4,245	4,304	91.39	94.03	8.61	5.97
April	4,319	4,170	92.68	91.11	7.32	8.89
May	4,397	3,675	94.66	80.29	5.34	19.71
June	4,645	3,612	100.00	78.92	.....	21.08
July	4,341	2,815	95.61	61.50	4.39	38.50
August	4,393	2,773	94.57	60.58	5.43	39.42
September	4,489	3,674	96.64	80.27	3.36	19.73
October	4,347	3,853	93.59	84.18	6.41	15.82
November	4,460	3,913	96.02	85.49	3.98	14.51
December	4,643	4,202	99.98	91.81	.02	8.19

3. Other Presentations.

CLASSIFICATION.	1899.	1900.	INCREASE OR DECREASE IN 1900.	
			Amount.	Pr ct.
Smallest No. of persons employed..	4,123	2,773	— 1,360	94.91
Greatest No. of persons employed..	4,645	4,577	— 68	1.46
Average No. of persons employed..	4,221	3,834	+ 387	9.17
Average yearly earnings	\$490 09	\$481 83	— \$8 26	1.68
Average time in operation, days....	297	289	— 8	2.69
No. of private firms	5	5	—	.....
No. of male partners	9	8	— 1	11.11
No. of female partners .....	.....	.....	.....	.....
Total No. of partners	9	8	— 1	11.11
No. of corporations	17	17	—	.....
No. of male stockholders	436	190	— 276	36.69
No. of female stockholders	21	14	— 7	33.33
Total No. of stockholders	457	174	— 283	61.92
Total No. of partners and stockholders	466	182	— 284	60.94
Amount of capital invested	\$4,509,698 15	\$4,825,275 93	+ \$315,577 78	6.98
Value of goods made or work done	11,377,207 82	10,350,159 08	— 1,027,048 74	9.03
Amount paid as wages	2,068,676 81	1,847,334 09	— 221,342 72	10.70
Av. capital to each person employed	1,068 40	1,268 55	+ 190 15	17.79
Av. product to each person employed	2,696 39	2,699 57	+ 3 18	.15

1 establishment did not report as to kind of management and No. of partners.

MANUFACTURERS' RETURNS, 1899-1900.

KNIT GOODS—18 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1899.				1900.			
	MALE	FE-MALE.	TOTAL.		MALE.	FE-MALE.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	177	1,816	1,993	63.35	173	1,552	1,725	52.37
\$5.00 but under \$6.00	60	315	375	11.92	38	448	486	14.75
6.00 but under 7.00	58	191	249	7.91	41	340	381	11.57
7.00 but under 8.00	75	121	196	6.23	71	169	240	7.29
8.00 but under 9.00	45	34	79	2.52	74	77	151	4.58
9.00 but under 10.00	68	31	99	3.15	70	61	131	3.98
10.00 but under 12.00	45	21	66	2.09	49	40	89	2.70
12.00 but under 15.00	38	2	40	1.27	41	4	45	1.36
15.00 but under 20.00	31	1	32	1.02	27	2	29	.88
20.00 and over	17	.....	17	.54	17	.....	17	.52
Totals	614	2,532	3,146	100.00	601	2,693	3,294	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1899.	1900.	1899.	1900.	1899.	1900.
January	2,566	2,732	83.39	83.34	16.61	16.66
February	2,611	2,820	84.86	86.03	15.14	13.97
March	2,725	3,023	88.56	92.22	11.44	7.78
April	2,784	3,047	93.73	92.95	6.27	7.05
May	2,869	3,087	93.24	94.17	6.74	5.83
June	2,901	3,154	94.28	96.22	5.72	3.78
July	2,992	3,229	97.23	98.61	2.87	1.49
August	3,038	3,278	98.73	100.00	1.27	.....
September	3,061	3,194	99.16	97.44	.84	2.56
October	3,077	3,169	100.00	96.68	.....	3.32
November	3,024	2,927	98.28	89.29	1.72	10.71
December	2,944	2,790	95.68	86.10	4.32	14.90

3. Other Presentations.

CLASSIFICATION.	1899.	1900.	INCREASE OR DECREASE IN 1900.	
			Amount.	Pct.
Smallest No. of persons employed..	2,566	2,732	+	166
Greatest No. of persons employed..	3,077	3,278	+	201
Average No. of persons employed..	2,882	3,038	+	156
Average yearly earnings	\$215 13	\$241 75	+	\$26 62
Average time in operation, days....	292	289	-	3
No. of private firms	4	3	-	1
No. of male partners	11	4	-	7
No. of female partners	1	.....	-	1
Total No. of partners	12	4	-	8
No. of corporations	13	14	+	1
No. of male stockholders.....	85	77	-	8
No. of female stockholders	21	41	+	20
Total No. of stockholders	106	118	+	12
Total No. of partners and stockholders	118	122	+	4
Amount of capital invested	\$2,234,022 61	\$2,287,989 46	+	\$53,966 85
Value of goods made or work done	2,653,028 78	3,111,307 09	+	458,278 31
Amount paid as wages	620,017 50	734,430 64	+	114,413 14
Av. capital to each person employed	775 16	753 12	-	22.04
Av. product to each person employed	920 55	1,024 13	+	103 58

1 establishment did not report as to kind of management and No. of partners.

MANUFACTURERS' RETURNS, 1899-1900.

LAGER BEER—72 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1899.				1900.			
	MALE.	FE-MALE.	TOTAL.		MALE.	FE-MALE.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	280	503	783	21.73	234	506	740	18.92
\$5.00 but under \$8.00	32	23	55	1.53	45	201	246	6.29
6.00 but under 7.00	93	3	96	2.66	176	1	177	4.53
7.00 but under 8.00	53	2	55	1.53	100	1	101	2.58
8.00 but under 9.00	105	.....	105	2.91	115	.....	115	2.94
9.00 but under 10.00	177	.....	177	4.91	257	.....	257	6.57
10.00 but under 12.00	652	.....	652	18.09	659	.....	659	16.85
12.00 but under 15.00	1,322	.....	1,322	36.68	1,069	.....	1,069	27.08
15.00 but under 20.00	317	.....	317	8.80	519	.....	519	13.27
20.00 and over	42	.....	42	1.16	38	.....	38	.97
Totals	3,073	531	3,604	100.00	3,202	709	3,911	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
	1899.	1900.	Employment.		Unemployment.	
			1899.	1900.	1899.	1900.
January	3,258	3,419	91.70	90.62	8.30	9.38
February	3,262	3,383	91.81	89.66	8.19	10.34
March	3,276	3,585	92.20	95.02	7.80	4.98
April	3,367	3,590	94.76	95.16	5.24	4.85
May	3,374	3,624	94.96	96.05	5.04	3.95
June	3,400	3,764	95.69	99.76	4.31	.24
July	3,399	3,727	95.67	98.78	4.33	1.22
August	3,400	3,735	95.69	99.00	4.31	1.00
September	3,442	3,773	96.88	100.00	3.12	.....
October	3,553	3,526	100.00	93.45	.....	6.55
November	3,455	3,462	97.24	90.17	2.76	9.83
December	3,381	3,355	95.44	89.21	4.56	10.79

3. Other Presentations.

CLASSIFICATION.	1899.	1900.	INCREASE OR DECREASE IN 1900.	
			Amount.	Prct.
Smallest No. of persons employed..	3,258	3,355	97	2.97
Greatest No. of persons employed..	3,553	3,773	220	6.19
Average No. of persons employed..	3,381	3,574	193	5.71
Average yearly earnings	\$461.08	\$514.33	\$53.25	11.55
Average time in operation, days....	301	315	14	4.65
No. of private firms	37	37	.....	.....
No. of male partners	60	50	10	16.67
No. of female partners	15	3	12	80.00
Total No. of partners	75	53	22	29.33
No. of corporations	34	34	.....	.....
No. of male stockholders	383	414	31	8.94
No. of female stockholders	66	82	16	24.24
Total No. of stockholders	449	496	47	10.47
Total No. of partners and stockholders	524	549	25	4.77
Amount of capital invested.....	\$35,097,827.40	\$39,119,956.50	\$4,022,129.10	11.46
Value of goods made or work done ..	19,728,386.43	22,165,940.04	2,437,553.61	12.35
Amount paid as wages	1,558,914.02	1,838,224.66	280,310.64	17.98
Av. capital to each person employed ..	10,380.90	10,945.71	564.81	5.44
Av. product to each person employed ..	5,835.07	6,202.00	366.93	6.29

1 establishment did not report as to kind of management and No. of partners.

LABOR AND INDUSTRIAL STATISTICS.

MANUFACTURERS' RETURNS, 1899-1900.

LEATHER—18 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1899.				1900.			
	MALE.	FE-MALE.	TOTAL.		MALE.	FE-MALE.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	157	204	361	8.25	160	7	167	3.74
\$5.00 but under \$6.00	115	77	192	4.39	89	2	91	2.04
6.00 but under 7.00	255	22	277	6.33	216	2	218	4.88
7.00 but under 8.00	758	1	759	17.86	655	1	656	14.68
8.00 but under 9.00	1,213	.....	1,213	27.74	1,227	.....	1,227	27.46
9.00 but under 10.00	578	2	580	13.26	577	4	581	19.72
10.00 but under 12.00	430	2	432	9.88	585	.....	585	13.09
12.00 but under 15.00	435	.....	435	9.95	531	.....	531	11.88
15.00 but under 20.00	114	.....	114	2.61	106	.....	106	2.37
20.00 and over	10	.....	10	.23	6	.....	6	.14
Totals	4,065	308	4,373	100.00	4,452	16	4,468	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
			1899.	1900.	1899.	1900.
January	3,824	4,183	86.44	99.26	13.56	.74
February	3,884	4,214	87.79	100.00	12.21	.....
March	3,920	4,192	88.61	99.48	11.39	.52
April	3,892	4,004	87.97	95.02	12.03	4.98
May	3,911	3,926	88.40	93.17	11.60	6.83
June	3,986	3,996	90.10	94.83	9.90	5.17
July	4,193	4,028	94.78	95.59	5.22	4.41
August	4,261	4,043	96.32	95.94	3.68	4.06
September	4,302	4,101	97.24	97.32	2.76	2.68
October	4,232	4,049	95.66	96.08	4.34	3.92
November	4,193	4,078	94.78	96.77	5.22	3.23
December	4,424	4,012	100.00	95.21	.....	4.79

3. Other Presentations.

CLASSIFICATION.	1899.	1900.	INCREASE OR DECREASE IN 1900.		
			Amount.	Pr ct.	
Smallest No. of persons employed..	3,824	3,926	+	102	2.67
Greatest No. of persons employed..	4,424	4,214	—	210	4.75
Average No. of persons employed..	4,085	4,069	—	16	.39
Average yearly earnings	\$390 00	\$406 27	+	\$16 21	4.18
Average time in operation, days....	307	306	—	1	.33
No. of private firms	5	5	.....	.....	.....
No. of male partners	11	10	—	1	9.09
No. of female partners .....	.....	1	+	1	.....
Total No. of partners	11	11	.....	.....	.....
No. of corporations	12	12	.....	.....	.....
No. of male stockholders	3,099	5,510	+	2,411	77.80
No. of female stockholders	1,023	1,530	+	507	49.56
Total No. of stockholders	4,122	7,040	+	2,918	70.86
Total No. of partners and stockholders	4,133	7,054	+	2,921	70.68
Amount of capital invested	\$11,236,466 73	\$11,012,268 36	—	224,198 37	2.00
Value of goods made or work done	13,057,737 42	14,937,946 52	+	1,880,209 10	14.40
Amount paid as wages	1,593,137 67	1,653,112 51	+	59,974 84	3.76
Av. capital to each person employed	2,750 67	2,706 38	—	44 29	1.61
Av. product to each person employed	3,196 51	3,671 16	+	474 65	14.85

1 establishment did not report as to kind of management and No. of partners.

MANUFACTURERS' RETURNS.

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MANUFACTURERS' RETURNS, 1899-1900.

LUMBER—98 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1899.				1900.			
	MALE.	FE-MALE.	TOTAL.		MALE.	FE-MALE.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	191	13	204	1.36	140	14	154	1.02
\$5.00 but under \$6.00	165	5	170	1.13	166	.....	166	1.10
6.00 but under 7.00	493	7	500	3.34	586	2	588	3.87
7.00 but under 8.00	1,683	4	1,687	11.25	1,023	4	1,027	6.76
8.00 but under 9.00	2,573	.....	2,573	17.16	2,238	3	2,241	14.74
9.00 but under 10.00	5,384	2	5,386	35.92	5,110	1	5,111	33.08
10.00 but under 12.00	2,448	.....	2,448	16.32	3,388	.....	3,388	22.23
12.00 but under 15.00	1,094	1	1,095	7.30	1,476	1	1,477	9.72
15.00 but under 20.00	572	.....	572	3.81	645	.....	645	4.25
20.00 and over	361	.....	361	2.41	413	.....	413	2.72
Totals	14,964	32	14,996	100.00	15,210	25	15,235	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1899.	1900.	1899.	1900.	1899.	1900.
January	7,003	8,470	55.44	68.83	44.56	31.17
February	7,179	8,827	56.84	70.07	43.16	29.93
March	7,718	8,668	61.11	68.81	38.89	31.19
April	9,701	10,564	76.81	83.87	23.19	16.13
May	12,117	12,286	95.94	97.54	4.06	2.46
June	12,627	12,358	99.98	98.11	.02	1.89
July	12,630	12,268	100.00	97.39	.....	2.61
August	12,463	12,596	98.67	100.00	1.33	.....
September	12,088	12,169	95.79	96.61	4.21	3.39
October	11,485	12,119	90.83	96.21	9.07	3.79
November	10,825	10,544	85.71	85.71	14.29	16.29
December	9,138	7,655	72.35	60.37	27.65	39.63

3. Other Presentations.

CLASSIFICATION.	1899.	1900.	INCREASE OR DECREASE IN 1900.		
			Amount.	Prcnt.	
Smallest No. of persons employed..	7,003	7,655	+	652	9.31
Greatest No. of persons employed..	12,630	12,596	—	34	.27
Average No. of persons employed..	10,415	10,710	+	295	2.83
Average yearly earnings	\$429 77	\$461 08	+	\$31 31	7.29
Average time in operation, days....	230	225	—	5	2.17
No. of private firms	42	40	—	2	4.75
No. of male partners	68	56	—	10	15.15
No. of female partners	7	6	—	1	14.29
Total No. of partners	73	62	—	11	15.07
No. of corporations	58	58	+	2	3.57
No. of male stockholders	290	1,495	+	1,205	415.52
No. of female stockholders	49	55	+	6	12.24
Total No. of stockholders	339	1,550	+	1,211	357.14
Total No. of partners and stockholders	412	1,612	+	1,200	291.26
Amount of capital invested.....	\$21,453,138 10	\$21,412,173 30	—	\$40,964 80	.19
Value of goods made or work done	23,119,094 33	31,664,761 29	+	8,545,666 96	36.91
Amount paid as wages	4,475,979 72	4,938,133 52	+	462,153 80	10.33
Av. capital to each person employed	2,069 83	1,999 27	—	60 59	2.94
Av. product to each person employed	2,219 79	2,956 56	+	736 77	33.15

MANUFACTURERS' RETURNS, 1899-1900.

MACHINERY-102 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1899.				1900.			
	MALE.	FE-MALE.	TOTAL.		MALE.	FE-MALE.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	449	2	442	5.45	447	2	449	5.73
\$5.00 but under \$6.00	103	1	104	1.28	157	4	161	2.06
6.00 but under 7.00	352	2	354	4.37	292	2	294	3.75
7.00 but under 8.00	657	1	658	8.12	711	1	712	9.08
8.00 but under 9.00	1,030	2	1,032	12.73	870	3	873	11.13
9.00 but under 10.00	1,343	3	1,346	16.60	1,257	4	1,261	15.92
10.00 but under 12.00	1,025	3	1,032	12.73	1,015	3	1,018	12.98
12.00 but under 15.00	1,445	.....	1,445	17.82	1,458	.....	1,458	18.59
15.00 but under 20.00	1,397	.....	1,397	17.23	1,364	.....	1,364	17.38
20.00 but over	297	.....	297	3.67	259	.....	259	3.31
Totals	8,093	14	8,107	100.00	7,890	19	7,909	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1899.	1900.	1899.	1900.	1899.	1900.
January	5,687	7,133	79.14	98.28	20.86	1.72
February	5,835	7,044	81.89	97.05	18.11	2.95
March	6,116	7,090	85.11	97.67	14.89	2.33
April	6,415	7,070	89.27	97.41	10.73	2.59
May	6,513	7,041	90.63	97.01	9.37	2.99
June	6,793	7,253	94.67	100.00	5.33	.....
July	6,833	7,222	96.48	99.52	3.52	.48
August	7,142	7,251	99.39	99.93	.61	.07
September	7,070	7,213	98.39	99.38	1.61	.62
October	7,122	7,054	99.11	97.19	.89	2.81
November	7,186	7,115	100.00	98.03	.....	1.97
December	7,003	7,224	97.45	99.53	2.55	.47

3. Other Presentations.

CLASSIFICATION.	1899.	1900.	INCREASE OR DECREASE IN 1900.	
			Amount.	Pct.
Smallest No. of persons employed..	5,687	7,041	+	1,354
Greatest No. of persons employed..	7,186	7,258	+	72
Average No. of persons employed..	6,656	7,143	+	487
Average yearly earnings	\$543 94	\$545 45	+	\$1 51
Average time in operation, days	297.10	299.20	+	2.10
No. of private firms.....	52	49	—	3
No. of male partners	99	85	—	14
No. of female partners.....	3	5	+	2
Total No. of partners.....	102	90	—	12
No. of corporations	46	49	+	3
No. of male stockholders	264	266	+	2
No. of female stockholders.....	43	42	—	1
Total No. of stockholders.....	307	308	+	1
Total No. of partners and stockholders	409	308	—	11
Amount of capital invested.....	\$12,043,735 00	\$13,073,725 96	+	\$1,029,990 96
Value of goods made or work done	12,836,120 76	14,656,607 80	+	1,820,487 04
Amount paid as wages	3,620,466 71	3,896,124 21	+	275,657 50
Av. capital to each person employed	1,824 48	1,830 28	+	5 80
Av. product to each person employed	1,928 50	2,151 88	+	223 38

4 establishments did not report as to kind of management and number of partners and stockholders.

MANUFACTURERS' RETURNS.

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MANUFACTURERS' RETURNS, 1899-1900.

MISCELLANEOUS—54 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1899.				1900.			
	MALE.	FE-MALE.	TOTAL.		MALE.	FE-MALE.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	224	380	584	23.05	235	423	658	23.82
\$5.00 but under \$6.00	67	38	105	4.14	72	60	132	4.78
6.00 but under 7.00	129	22	151	5.95	147	34	181	6.56
7.00 but under 8.00	184	9	193	7.61	190	15	205	7.43
8.00 but under 9.00	223	5	228	9.00	139	4	143	5.11
9.00 but under 10.00	214	2	216	8.54	305	7	312	11.30
10.00 but under 12.00	556	1	557	21.98	508	3	511	18.50
12.00 but under 15.00	280	1	281	11.08	377	.....	377	13.65
15.00 but under 20.00	78	.....	78	3.07	73	.....	73	2.65
20.00 and over	140	.....	140	5.54	171	.....	171	6.19
Totals	2,095	438	2,533	100.00	2,217	546	2,763	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1899.	1900.	1899.	1900.	1899.	1900.
January	2,037	2,248	86.79	92.66	13.21	7.34
February	2,095	2,293	89.26	94.52	10.74	5.48
March	2,347	2,426	100.00	100.00	.....	.....
April	2,276	2,411	96.96	99.79	3.04	.21
May	2,081	2,276	89.66	93.82	10.34	6.18
June	1,958	2,199	83.43	90.64	16.57	9.36
July	1,623	1,820	69.15	75.02	30.85	24.98
August	1,659	1,767	70.58	72.83	29.42	27.17
September	1,967	2,110	83.38	86.98	16.62	13.02
October	2,106	2,178	89.73	89.78	10.27	10.22
November	2,179	2,288	92.41	93.49	7.59	6.51
December	2,144	2,244	91.35	92.49	8.65	7.51

3. Other Presentations.

CLASSIFICATION.	1899.	1900.	INCREASE OR DECREASE IN 1900.	
			Amount.	Pct.
Smallest No. of persons employed..	1,623	1,767	+	144 8.88
Greatest No. of persons employed..	2,347	2,426	+	79 3.36
Average No. of persons employed..	2,039	2,187	+	148 7.25
Average yearly earnings.....	\$424 14	\$424 84	+	\$0 70 .16
Average time in operation, days....	297	294	-	3 1.01
No. of private firms	24	22	-	2 8.33
No. of male partners	48	36	-	12 25.00
No. of female partners	4	1	-	3 75.00
Total No. of partners.....	52	37	-	15 28.85
No. of corporations	28	30	+	2 7.14
No. of male stockholders	1,347	1,559	+	212 15.74
No. of female stockholders	17	23	+	6 35.30
Total No. of stockholders	1,364	1,582	+	218 15.98
Total No. of partners and stockholders	1,416	1,619	+	203 14.34
Amount of capital invested.....	\$4,769,142 02	\$4,784,800 19	+	\$15,658 17 .33
Value of goods made or work done	4,450,050 00	4,795,250 00	+	345,200 00 7.75
Amount paid as wages	864,816 79	929,116 03	+	64,299 64 7.44
Av. capital to each person employed	2,182 40	2,192 60	+	10 20 .46
Av. product to each person employed	2,338 90	2,188 30	-	150 50 6.43

2 establishments did not report as to kind of management and number of partners and stockholders.

MANUFACTURERS' RETURNS, 1899-1900.

OFFICE FIXTURES, 15 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1899.				1900.			
	MALE.	FE-MALE.	TOTAL.		MALE.	FE-MALE.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	69	.....	69	7.51	77	.....	77	9.24
\$5.00 but under \$6.00	42	.....	42	4.57	18	.....	18	2.16
6.00 but under 7.00	27	.....	27	2.94	30	.....	30	3.60
7.00 but under 8.00	109	.....	109	11.86	82	.....	82	9.85
8.00 but under 9.00	83	.....	83	9.03	75	.....	75	9.00
9.00 but under 10.00	150	.....	150	11.32	131	.....	131	15.73
10.00 but under 12.00	224	.....	224	24.37	233	.....	233	27.97
12.00 but under 15.00	128	.....	128	13.93	145	.....	145	17.41
15.00 but under 20.00	78	.....	78	8.49	37	.....	37	4.44
20.00 and over	9	.....	9	.98	5	.....	5	.60
Totals	919	.....	919	100.00	833	.....	833	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1899.	1900.	1899.	1900.	1899.	1900.
January	738	672	89.24	89.48	10.76	10.52
February	753	706	81.05	94.01	8.95	5.99
March	808	717	87.82	95.47	2.18	4.53
April	813	735	98.31	97.87	1.69	2.13
May	813	751	98.31	100.00	1.69	.....
June	818	744	98.91	99.07	1.09	.93
July	825	730	99.76	97.20	.24	2.80
August	827	740	100.00	98.53	.....	1.47
September	824	737	99.64	98.13	.36	1.87
October	802	736	96.96	98.00	3.04	2.00
November	801	748	96.86	99.60	3.14	.40
December	737	713	89.12	94.94	10.88	5.06

3. Other Presentations.

CLASSIFICATION.	1899.	1900.	INCREASE OR DECREASE IN 1900.		
			Amount.	Pct.	
Smallest No. of persons employed..	737	672	—	65	8.82
Greatest No. of persons employed..	827	751	—	76	9.19
Average No. of persons employed..	797	727	—	70	8.78
Average yearly earnings	\$398 93	\$423 38	+	\$24 45	6.13
Average time in operation, days....	296	295	—	1	3.38
No. of private firms	6	6	—	—	—
No. of male partners	13	13	—	—	—
No. of female partners	—	—	—	—	—
Total No. of partners	13	13	—	—	—
No. of corporations	9	9	—	—	—
No. of male stockholders	123	165	+	42	34.15
No. of female stockholders	—	22	+	22	—
Total No. of stockholders	123	187	+	64	52.03
Total No. of partners and stockholders	136	200	+	64	47.06
Amount of capital invested	\$816,711 29	\$765,213 78	—	\$51,497 51	6.31
Value of goods made or work done.	1,064,284 87	1,016,227 47	—	48,057 40	4.51
Amount paid as wages	317,951 13	307,797 92	—	10,153 21	3.19
Av. capital to each person employed	1,024 73	1,052 56	+	27 83	2.71
Av. product to each person employed	1,335 36	1,397 84	+	62 48	4.68

MANUFACTURERS' RETURNS, 1899-1900.

PAINTS-7 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1899.				1900.			
	MALE.	FE-MALE.	TOTAL.		MALE.	FE-MALE.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	14	10	24	17.02	9	11	20	12.05
\$5.00 but under \$6.00	1	1	2	.71	5	5	10	3.01
6.00 but under 7.00	12	12	24	8.51	6	6	12	3.61
7.00 but under 8.00	1	1	2	.71	10	10	20	6.02
8.00 but under 9.00	18	18	36	12.76	23	23	46	13.86
9.00 but under 10.00	36	36	72	25.53	40	40	80	24.10
10.00 but under 12.00	20	20	40	14.18	20	20	40	12.05
12.00 but under 15.00	11	11	22	7.81	30	30	60	18.07
15.00 but under \$20.00	2	2	4	1.42	3	3	6	1.81
20.00 and over	16	16	32	11.35	9	9	18	5.42
Totals	131	10	141	100.00	155	11	166	100.00

2. Number of Persons Employed, Range of Employment--By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF--			
			Employment.		Unemployment.	
	1899	1900.	1899.	1900.	1899.	1900.
January	129	139	92.14	94.56	7.86	5.44
February	129	139	92.14	94.56	7.86	5.44
March	134	143	95.71	97.28	4.29	2.72
April	138	146	98.57	99.32	1.43	.68
May	140	144	100.00	97.96	.....	2.04
June	115	121	82.14	82.31	17.86	17.69
July	138	147	98.57	100.00	1.43	.....
August	138	143	98.57	97.28	1.43	2.72
September	138	144	98.57	97.96	1.43	2.04
October	138	143	98.57	97.28	1.43	2.72
November	139	146	99.29	99.32	.71	.68
December	133	140	95.00	95.24	5.00	4.76

3. Other Presentations.

CLASSIFICATION.	1899.	1900.	INCREASE OR DECREASE IN 1900.	
			Amount.	Prct.
Smallest No. of persons employed..	115	121	+	6
Greatest No. of persons employed..	140	147	+	7
Average No. of persons employed..	134	141	+	7
Average yearly earnings	\$362 01	\$375 76	+	\$13 75
Average time in operation, days....	275	273	-	2
No. of private firms	4	4	.....	.....
No. of male partners	6	6	.....	.....
No. of female partners .....	.....	.....	.....	.....
Total No. of partners	6	6	.....	.....
No. of corporations	3	3	.....	.....
No. of male stockholders	9	9	.....	.....
No. of female stockholders	1	1	.....	.....
Total No. of stockholders	10	10	.....	.....
Total No. of partners and stockholders	16	16	.....	.....
Amount of capital invested	\$740,237 52	\$747,413 18	+	\$7,175 66
Value of goods made or work done..	1,225,002 77	1,306,492 75	+	81,489 98
Amount paid as wages	48,509 15	52,982 15	+	4,473 00
Av. capital to each person employed	5,524 16	5,300 80	-	223 36
Av. product to each person employed	9,141 81	9,265 90	+	124 09

MANUFACTURERS' RETURNS, 1899-1900.

PAPER AND PULP-30 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1899.				1900.			
	MALE.	FE-MALE.	TOTAL.		MALE.	FE-MALE.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	101	604	705	19.24	87	595	682	18.75
\$5.00 but under \$6.00	48	28	76	2.07	99	60	159	3.91
6.00 but under 7.00	232	27	259	7.88	214	34	248	6.09
7.00 but under 8.00	634	13	647	17.65	434	11	445	10.93
8.00 but under 9.00	333	.....	333	9.09	769	.....	769	18.88
9.00 but under 10.00	932	.....	932	25.43	1,068	.....	1,068	28.96
10.00 but under 12.00	307	3	310	8.46	323	.....	323	7.93
12.00 but under 15.00	148	.....	148	4.04	156	.....	156	3.93
15.00 but under 20.00	192	.....	192	5.24	195	.....	195	4.79
20.00 and over	33	.....	33	.90	37	.....	37	.91
Totals	2,990	676	3,665	100.00	3,872	700	4,072	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1899.	1900.	1899.	1900.	1899.	1900.
January	2,334	3,256	84.90	85.06	15.10	14.94
February	2,964	3,292	86.76	86.00	14.24	14.00
March	3,130	3,479	90.06	90.88	9.94	9.12
April	3,257	3,447	94.24	90.06	5.76	9.95
May	3,257	3,561	94.24	93.08	5.76	6.97
June	3,338	3,541	96.58	92.50	3.42	7.50
July	3,314	3,519	96.89	91.92	4.11	8.08
August	3,382	3,733	97.86	97.52	2.14	2.48
September	3,396	3,629	98.27	94.80	1.73	5.20
October	3,314	3,502	96.89	91.48	4.11	8.52
November	3,439	3,828	99.51	100.00	.49	.....
December	3,456	3,827	100.00	99.97	.....	.03

3. Other Presentations.

CLASSIFICATION.	1899.	1900.	INCREASE OR DECREASE IN 1900.		
			Amount.	Pct.	
Smallest No. of persons employed..	2,334	3,256	+	322	10.97
Greatest No. of persons employed..	3,456	3,828	+	372	17.64
Average No. of persons employed..	3,265	3,551	+	286	8.76
Average yearly earnings	\$401 69	\$399 27	—	\$2 42	.60
Average time in operation, days....	295	295			
No. of private firms.....	4	4			
No. of male partners	11	11			
No. of female partners					
Total No. of partners.....	11	11			
No. of corporations	25	25			
No. of male stockholders	320	284	—	36	11.25
No. of female stockholders	41	48	+	7	17.07
Total No. of stockholders	361	332	—	29	8.03
Total No. of partners and stockholders	372	343	—	29	7.80
Amount of capital invested	\$10,295,994 07	\$10,905,416 60	+	\$609,422 53	5.82
Value of goods made or work done.	8,783,114 60	9,066,774 95	+	283,660 35	3.23
Amount paid as wages	1,811,536 19	1,417,818 28	—	106,282 09	8.10
Av. capital to each person employed	3,153 44	3,071 08	—	82 36	2.61
Av. product to each person employed	2,690 08	2,553 30	—	136 78	5.08

1 establishment did not report as to kind of management and number of partners and stockholders.

MANUFACTURERS' RETURNS, 1899-1900.

SADDLERY-7 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1899.				1900.			
	MALE.	FE-MALE.	TOTAL.		MALE.	FE-MALE.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	29	71	100	35.90	46	92	138	37.91
\$5.00 but under \$6.00	10	15	25	9.23	15	24	39	10.71
6.00 but under 7.00	16	5	21	7.76	12	2	14	3.85
7.00 but under 8.00	19	.....	19	7.01	25	2	27	7.42
8.00 but under 9.00	26	.....	26	9.59	22	7	29	7.87
9.00 but under 10.00	26	.....	19	7.01	20	.....	20	5.49
10.00 but under 12.00	26	.....	26	9.59	39	.....	39	10.71
12.00 but under 15.00	28	.....	28	10.33	35	.....	35	9.62
15.00 but under 20.00	4	.....	4	1.43	18	.....	18	4.95
20.00 and over	3	.....	3	1.11	5	.....	5	1.37
Totals	190	91	271	100.00	237	127	364	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1899.	1900.	1899.	1900.	1899.	1900.
January	204	240	79.07	72.73	20.93	27.27
February	199	257	77.13	77.88	22.87	22.12
March	220	280	85.27	84.85	14.73	15.15
April	230	292	89.15	88.48	10.85	11.52
May	238	305	92.25	92.42	7.75	7.58
June	231	293	89.53	88.79	10.47	11.21
July	214	271	82.96	82.12	17.05	17.88
August	199	259	77.13	78.47	22.87	21.53
September	166	226	64.34	68.48	35.66	31.52
October	200	252	77.52	76.36	22.48	23.64
November	217	285	84.11	86.36	15.89	13.64
December	258	330	100.00	100.00	.....	.....

3. Other Presentations.

CLASSIFICATION.	1899.	1900.	INCREASE OR DECREASE IN 1900.	
			Amount.	Pr. ct.
Smallest No. of persons employed..	166	226	+	60
Greatest No. of persons employed..	258	330	+	72
Average No. of persons employed..	215	273	+	58
Average yearly earnings	\$387 84	\$366 06	—	\$21 78
Average time in operation, days....	296	302	+	6
No. of private firms	2	2	.....	.....
No. of male partners	6	6	.....	.....
No. of female partners	1	.....	—	1
Total No. of partners	7	6	—	1
No. of corporations	5	5	.....	.....
No. of male stockholders	19	21	+	2
No. of female stockholders	4	3	—	1
Total No. of stockholders	23	24	+	1
Total No. of partners and stockholders	30	30	.....	.....
Amount of capital invested	\$182,665 44	\$191,394 66	+	\$8,729 22
Value of goods made or work done.	459,557 01	534,838 59	+	75,281 58
Amount paid as wages	82,335 13	99,935 28	+	16,550 25
Av. capital to each person employed	849 60	701 08	—	148 52
Av. product to each person employed	2,157 47	1,959 12	—	178 35

MANUFACTURERS' RETURNS, 1899-1900.

SASH, ETC.—66 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1899.				1900.			
	MALE	FE-MALE.	TOTAL.		MALE.	FE-MALE.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	192	43	635	15.58	578	32	610	14.13
\$5.00 but under \$6.00	165	2	167	4.10	140	2	142	3.31
6.00 but under \$7.00	570	2	572	14.03	477	1	478	11.13
7.00 but under 8.00	712	1	713	17.49	696	.....	696	16.20
8.00 but under 9.00	512	.....	512	12.56	650	.....	650	15.13
9.00 but under 10.00	613	1	614	15.06	705	1	706	16.44
10.00 but under 12.00	368	.....	368	9.03	355	.....	355	8.26
12.00 but under 15.00	311	.....	311	7.64	487	.....	487	11.34
15.00 but under 20.00	165	.....	165	4.06	155	.....	155	3.62
20.00 and over	19	.....	19	.47	19	.....	19	.44
Totals	4,027	49	4,076	100.00	4,262	36	4,298	100.00

2. Number of Persons Employed Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1899.	1900.	1899.	1900.	1899.	1900.
January	2,936	2,871	77.02	77.46	22.98	22.55
February	3,025	3,267	79.43	88.13	20.57	11.87
March	3,256	3,478	86.20	93.82	13.80	6.18
April	3,619	3,657	94.68	99.46	5.32	.54
May	3,755	3,683	97.98	99.35	2.02	.65
June	3,802	3,636	95.38	98.09	4.62	1.91
July	3,626	3,518	95.12	94.90	4.88	5.10
August	3,612	3,500	100.00	94.42	.....	5.58
September	3,766	3,607	98.79	97.30	1.21	2.70
October	3,699	3,414	97.04	92.09	2.96	7.91
November	3,735	3,701	97.72	100.00	2.28	.....
December	3,411	3,532	89.48	95.28	10.52	4.72

3. Other Presentations.

CLASSIFICATION.	1899.	1900.	INCREASE OR DECREASE IN 1900.		
			Amount.	Pr ct.	
Smallest No. of persons employed..	2,936	2,871	—	65	2.21
Greatest No. of persons employed..	3,812	3,707	—	105	2.75
Average No. of persons employed..	3,537	3,492	—	45	1.27
Average yearly earnings	\$358 83	\$365 97	+	\$7 14	1.19
Average time in operation, days....	277	274	—	3	1.09
No. of private firms.....	42	40	—	2	4.75
No. of male partners	85	77	—	8	9.41
No. of female partners	3	1	—	2	66.67
Total No. of partners	88	78	—	10	1.14
No. of corporations	24	26	+	2	8.33
No. of male stockholders	143	146	+	3	2.09
No. of female stockholders	3	13	+	10	333.33
Total No. of stockholders	146	159	+	13	9.57
Total No. of partners and stockholders	234	237	+	3	1.28
Amount of capital invested.....	\$4,828,360 94	\$4,945,150 59	+	\$116,789 65	2.42
Value of goods made or work done.	6,326,134 75	6,264,638 60	—	38,503 85	.61
Amount paid as wages	1,269,173 91	1,277,988 16	+	8,814 25	.69
Av. capital to each person employed	1,365 10	1,416 14	+	51 04	3.74
Av. product to each person employed	1,788 56	1,822 63	+	34 07	1.90

MANUFACTURERS' RETURNS, 1899-1900.

SHEET METAL GOODS—21 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1899.				1900.			
	MALE.	FE-MALE.	TOTAL.		MALE.	FE-MALE.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	749	470	1,219	53.23	578	353	929	44.02
\$5.00 but under \$6.00	164	7	171	7.47	187	28	215	10.19
6.00 but under 7.00	161	1	162	7.07	203	4	207	9.81
7.00 but under 8.00	140	1	141	6.16	149	1	150	7.11
8.00 but under 9.00	125	.....	125	5.46	150	.....	150	7.11
9.00 but under 10.00	116	.....	116	5.06	128	.....	128	6.07
10.00 but under 12.00	133	.....	133	5.81	135	.....	135	6.40
12.00 but under 15.00	125	.....	125	5.46	106	.....	106	5.02
15.00 but under 20.00	70	.....	70	3.06	66	.....	66	3.13
20.00 and over	28	.....	28	1.22	24	.....	24	1.14
Total	1,811	479	2,290	100.00	1,724	386	2,110	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1899.	1900.	1899.	1900.	1899.	1900.
January	1,850	1,777	82.22	88.72	17.78	11.28
February	1,910	1,834	84.89	91.56	15.11	8.44
March	1,958	1,823	87.02	91.01	12.98	8.99
April	2,006	1,753	89.16	87.52	10.84	12.48
May	2,044	1,662	90.84	82.98	9.16	17.02
June	2,053	1,461	91.24	72.94	8.76	27.06
July	2,087	1,829	92.75	91.31	7.25	8.69
August	2,606	1,914	96.27	95.56	3.73	4.44
September	2,211	1,942	98.27	96.95	1.73	3.05
October	2,250	2,003	100.00	100.00	.....	.....
November	2,137	1,684	94.98	84.07	5.02	15.93
December	2,048	1,711	91.02	85.42	8.98	14.58

3. Other Presentations.

CLASSIFICATION.	1899.	1900.	INCREASE OR DECREASE IN 1900.		
			Amount.	Prct.	
Smallest No. of persons employed..	1,850	1,461	—	389	21.02
Greatest No. of persons employed..	2,250	2,003	—	247	10.98
Average No. of persons employed..	2,060	1,783	—	277	13.45
Average yearly earnings	\$280 74	\$317 36	+	\$36 58	13.03
Average time in operation, days....	301	301			
No. of private firms	18	16			
No. of male partners	29	28	—	1	3.45
No. of female partners					
Total No. of partners	29	28	—	1	3.45
No. of corporations	5	5			
No. of male stockholders	17	17			
No. of female stockholders	2	3	+	1	50.00
Total No. of stockholders	19	20	+	1	5.26
Total No. of partners and stockholders	48	48			
Amount of capital invested	\$2,463,317 89	\$2,517,191 65	+	\$53,873 76	2.19
Value of goods made or work done..	3,619,991 98	2,897,199 66	—	722,792 32	19.97
Amount paid as wages	578,404 05	565,848 52	—	12,555 53	2.17
Av. capital to each person employed	1,195 79	1,411 77	+	215 98	18.06
Av. product to each person employed	1,757 23	1,624 90	—	132 33	7.53

MANUFACTURERS' RETURNS, 1899-1900.

SHIP BUILDING—7 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1899.				1900.			
	MALE.	FE-MALE.	TOTAL.		MALE.	FE-MALE.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	2	.....	2	.13	4	.....	4	.29
\$5.00 but under \$6.00 .....	.....	3	3	.19	.....	3	6	.43
6.00 but under 7.00	65	.....	65	4.16	13	.....	13	.93
7.00 but under 8.00	140	.....	140	8.96	50	.....	50	3.68
8.00 but under 9.00	9	.....	9	.58	154	.....	154	11.03
9.00 but under 10.00	490	.....	490	31.37	276	.....	276	19.77
10.00 but under 12.00	276	.....	276	17.67	248	.....	248	17.77
12.00 but under 15.00	311	.....	311	19.91	283	.....	283	20.27
15.00 but under 20.00	243	.....	243	15.56	306	.....	306	21.92
20.00 and over	23	.....	23	1.47	56	.....	56	4.01
Totals	1,559	3	1,562	100.00	1,393	3	1,396	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1899.	1900.	1899.	1900.	1899.	1900.
January	913	854	66.11	67.99	33.89	32.01
February	978	829	70.81	73.96	29.19	26.04
March	1,210	1,193	87.62	94.98	12.38	5.02
April	1,105	1,253	80.02	99.76	19.98	.24
May	1,381	1,266	100.00	100.00	.....	.....
June	1,014	1,048	73.43	83.44	26.57	16.56
July	820	783	60.10	62.34	39.90	37.66
August	668	591	48.37	47.05	51.63	52.95
September	850	710	61.55	56.53	38.45	43.47
October	753	680	54.52	50.16	45.48	49.84
November	707	627	51.19	49.92	48.81	50.08
December	830	678	60.10	53.98	39.90	46.02

3. Other Presentations.

CLASSIFICATION.	1899.	1900.	INCREASE OR DECREASE IN 1900.	
			Amount.	Pr. ct.
Smallest No. of persons employed..	668	591	—	77
Greatest No. of persons employed..	1,381	1,266	—	125
Average No. of persons employed..	937	879	—	58
Average yearly earnings	\$454 05	\$451 39	—	\$2 66
Average time in operation, days....	279	292	+	13
No. of private firms	3	3	.....	.....
No. of male partners	5	5	.....	.....
No. of female partners .....	.....	.....	.....	.....
Total No. of partners	5	5	.....	.....
No. of corporations	2	2	.....	.....
No. of male stockholders	11	11	.....	.....
No. of female stockholders	1	1	.....	.....
Total No. of stockholders	12	12	.....	.....
Total No. of partners and stockholders	17	17	.....	.....
Amount of capital invested.....	\$1,149,325 19	\$1,158,444 32	+	\$9,119 13
Value of goods made or work done.	992,151 11	1,227,266 40	+	305,115 29
Amount paid as wages.....	425,447 34	396,771 68	—	28,675 71
Av. capital to each person employed	1,226 60	1,317 91	+	91 30
Av. product to each person employed	1,055 34	1,396 21	+	340 87

2 establishments did not report as to kind of management and No. of partners.

MANUFACTURERS' RETURNS, 1899-1900.
SOAP, LYE AND POTASH—9 ESTABLISHMENTS.
1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1899.				1900.			
	MALE.	FE-MALE.	TOTAL.		MALE.	FE-MALE.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	18	80	96	46.60	11	50	61	31.60
\$5.00 but under \$6.00	5	6	11	5.34	4	31	35	18.13
6.00 but under 7.00	5	.....	5	2.43	7	.....	7	3.63
7.00 but under 8.00	18	.....	18	8.73	13	.....	13	6.74
8.00 but under 9.00	21	.....	21	10.13	22	.....	22	11.40
9.00 but under 10.00	17	.....	17	8.25	17	.....	17	8.51
10.00 but under 12.00	14	.....	14	6.79	12	.....	12	6.22
12.00 but under 15.00	14	.....	14	6.80	13	.....	13	6.73
15.00 but under 20.00	7	.....	7	3.40	11	.....	11	5.70
20.00 and over	3	.....	3	1.46	2	.....	2	1.04
Totals	120	86	206	100.00	112	81	193	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1899.	1900.	1899.	1900.	1899.	1900.
January	201	191	100.00	100.00	.....	.....
February	199	189	99.00	98.95	1.00	1.05
March	198	190	98.51	98.48	1.49	.52
April	193	191	96.02	100.00	3.98	.....
May	192	187	95.52	97.91	4.48	2.09
June	201	184	100.00	96.33	.....	3.67
July	193	177	96.02	92.67	3.98	7.33
August	192	174	95.52	91.10	4.48	8.90
September	195	177	97.01	92.67	2.99	7.33
October	199	186	99.00	97.38	1.00	2.62
November	195	167	97.01	87.43	2.99	12.57
December	197	162	98.01	84.82	1.99	15.18

3. Other Presentations.

CLASSIFICATION.	1899.	1900.	INCREASE OR DECREASE IN 1900.		
			Amount.	Pr ct.	
Smallest No. of persons employed..	192	162	—	24	12.50
Greatest No. of persons employed..	201	191	—	10	4.98
Average No. of persons employed..	196.30	180	—	16.30	8.30
Average yearly earnings	\$378 90	\$349 99	—	\$28 91	7.63
Average time in operation, days....	303	298	—	5	1.65
No. of private firms	6	6	.....	.....	.....
No. of male partners	9	9	.....	.....	.....
No. of female partners	1	1	.....	.....	.....
Total No. of partners	10	10	.....	.....	.....
No. of corporations	3	3	.....	.....	.....
No. of male stockholders	42	42	.....	.....	.....
No. of female stockholders	4	4	.....	.....	.....
Total No. of stockholders	46	46	.....	.....	.....
Total No. of partners and stockholders	56	56	.....	.....	.....
Amount of capital invested	\$534,693 75	\$465,459 83	—	\$69,234 42	12.94
Value of goods made or work done.	856,347 85	846,760 52	—	9,587 33	1.12
Amount paid as wages	64,265 16	62,998 33	—	1,266 83	1.97
Av. capital to each person employed	2,728 08	2,585 89	—	142 14	5.21
Av. product to each person employed	4,362 44	4,704 17	+	341 73	7.83

MANUFACTURERS' RETURNS, 1899-1900.
STAVES AND HEADING—15 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1899.				1900.			
	MALE.	FE-MALE.	TOTAL.		MALE.	FE-MALE.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	71	.....	71	13.45	48	.....	48	9.25
\$5.00 but under \$6.00	28	.....	28	5.30	29	.....	29	5.59
6.00 but under 7.00	33	.....	33	6.25	33	.....	33	6.36
7.00 but under 8.00	124	.....	124	23.48	107	.....	107	20.61
8.00 but under 9.00	100	.....	100	18.94	108	.....	108	20.81
9.00 but under 10.00	80	.....	80	15.15	77	.....	77	14.83
10.00 but under 12.00	40	.....	40	7.58	40	.....	40	7.71
12.00 but under 15.00	24	.....	24	4.55	34	.....	34	6.55
15.00 but under 20.00	25	.....	25	4.73	36	.....	36	6.94
20.00 and over	3	.....	3	.57	7	.....	7	1.35
Totals	528	.....	528	100.00	519	.....	519	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1899.	1900.	1899.	1900.	1899.	1900.
January	386	348	83.37	76.82	16.63	23.18
February	376	358	81.21	79.03	18.79	20.97
March	426	417	91.79	92.05	8.21	7.95
April	463	453	100.00	100.00	.....	.....
May	443	441	95.68	97.35	4.32	2.66
June	399	422	86.18	93.16	13.82	6.84
July	333	292	71.92	86.53	28.08	13.47
August	279	358	60.26	79.03	39.75	20.97
September	239	281	51.62	62.03	48.38	37.97
October	239	249	51.62	54.97	48.38	45.03
November	264	270	57.02	61.81	42.98	38.19
December	342	322	73.87	71.08	26.13	28.92

3. Other Presentations.

CLASSIFICATION.	1899.	1900.	INCREASE OR DECREASE IN 1900.		
			Amount.	Prct.	
Smallest No. of persons employed..	239	249	+	10	4.18
Greatest No. of persons employed..	463	453	—	10	2.16
Average No. of persons employed..	349	359	+	10	2.87
Average yearly earnings	\$311 73	\$333 88	+	\$22 15	7.11
Average time in operation, days....	244	246	+	2	.82
No. of private firms	7	8	+	1	14.29
No. of male partners	14	18	+	4	28.57
No. of female partners .....	.....	.....	.....	.....	.....
Total No. of partners	14	18	+	4	28.57
No. of corporations	8	7	—	1	12.50
No. of male stockholders	31	28	—	3	9.68
No. of female stockholders	1	1	.....	.....	.....
Total No. of stockholders.....	32	29	—	3	9.38
Total No. of partners and stockholders ..	46	47	+	1	2.17
Amount of capital invested	\$266,656 44	\$272,302 65	+	\$5,646 21	2.12
Value of goods made or work done.	377,988 11	398,060 64	+	20,072 53	5.31
Amount paid as wages	108,772 31	119,862 22	+	11,089 91	10.20
Av. capital to each person employed	764 06	758 50	—	5 56	.73
Av. product to each person employed	1,083 06	1,108 80	+	25 74	2.38

MANUFACTURERS' RETURNS.

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MANUFACTURERS' RETURNS, 1899-1900.

STONE-3 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1899.				1900.			
	MALE.	FE-MALE.	TOTAL.		MALE.	FE-MALE.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	8	.....	8	1.65	10	.....	10	2.12
\$5.00 but under \$6.00	2	.....	2	.41	4	.....	4	.85
6.00 but under 7.00	3	.....	3	.62	5	.....	5	1.06
7.00 but under 8.00	63	.....	63	12.99	59	.....	59	12.50
8.00 but under 9.00	15	.....	15	3.09	15	.....	15	3.18
9.00 but under 10.00	84	.....	84	17.32	59	.....	59	12.50
10.00 but under 12.00	89	.....	89	18.35	52	.....	52	11.02
12.00 but under 15.00	93	.....	93	19.18	114	.....	114	24.15
15.00 but under 20.00	47	.....	47	9.69	93	.....	93	19.70
20.00 and over	81	.....	81	16.70	61	.....	61	12.92
Totals	485	.....	485	100.00	472	.....	472	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
	1899.	1900.	Employment.		Unemployment.	
			1899.	1900.	1899.	1900.
January	163	213	38.90	50.35	61.10	49.65
February	118	164	28.16	38.78	71.84	61.22
March	191	221	45.58	62.25	54.42	47.75
April	320	368	76.37	87.00	23.63	13.00
May	370	401	88.31	94.80	11.69	5.20
June	380	406	85.92	95.98	14.08	4.02
July	400	416	95.47	98.35	4.53	1.65
August	387	423	92.36	100.00	7.64	.....
September	419	413	100.00	97.64	.....	2.36
October	347	332	82.82	78.49	17.18	21.51
November	301	286	74.22	67.61	25.78	32.39
December	239	191	57.04	45.15	42.96	54.85

3. Other Presentations.

CLASSIFICATION.	1899.	1900.	INCREASE OR DECREASE IN 1900.	
			Amount.	Pr. ct.
Smallest No. of persons employed..	118	164	+	46
Greatest No. of persons employed..	419	423	+	4
Average No. of persons employed..	301	320	+	19
Average yearly earnings	\$538 57	\$576 34	+	\$37 77
Average time in operation, days....	286	262	-	4
No. of private firms	10	10	.....	.....
No. of male partners	17	22	+	5
No. of female partners	2	2	.....	.....
Total No. of partners	19	24	+	5
No. of corporations	3	3	.....	.....
No. of male stockholders	22	22	.....	.....
No. of female stockholders .....	.....	.....	.....	.....
Total No. of stockholders	22	22	.....	.....
Total No. of partners and stockholders	41	46	+	5
Amount of capital invested	\$523,577 14	\$569,022 71	+	\$45,445 57
Value of goods made or work done.	527,131 25	600,981 25	+	73,850 00
Amount paid as wages	162,111 14	183,427 80	+	21,316 66
Av. capital to each person employed	1,739 46	1,780 07	+	40 61
Av. product to each person employed	1,751 27	1,878 06	+	126 79

2 establishments did not report as to kind of management and No. of partners.

MANUFACTURERS' RETURNS, 1899-1900.

STRAW GOODS—3 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1899.				1900.			
	MALE.	FE. MALE.	TOTAL.		MALM.	FE. MALE.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	60	237	297	35.66	48	216	264	34.51
\$5.00 but under \$6.00	55	240	295	36.42	50	192	242	31.63
6.00 but under 7.00	52	4	56	6.72	57	6	63	8.24
7.00 but under 8.00	55	6	61	7.32	62	6	68	8.89
8.00 but under 9.00	35	10	45	5.40	30	10	40	5.23
9.00 but under 10.00	17	8	25	3.00	21	8	29	3.79
10.00 but under 12.00	16	6	22	2.64	16	6	22	2.88
12.00 but under 15.00	16	.....	16	1.92	21	.....	21	2.74
15.00 but under 20.00	11	.....	11	1.32	11	.....	11	1.44
20.00 and over	5	.....	5	.60	5	.....	5	.65
Totals	322	511	833	100.00	321	444	765	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1899.	1900.	1899.	1900.	1899.	1900.
January	515	589	63.04	78.01	36.96	21.99
February	672	675	82.25	89.40	17.75	10.60
March	765	715	93.64	94.70	6.36	5.30
April	817	755	100.00	100.00	.....	.....
May	772	647	94.49	85.70	5.51	14.30
June	493	427	60.34	56.56	39.66	43.44
July	507	451	62.06	59.74	37.94	40.26
August	623	691	76.25	91.52	23.75	8.48
September	649	506	79.44	67.02	20.56	32.98
October	686	575	83.97	76.16	16.03	23.84
November	469	335	57.41	44.37	42.59	55.63
December	538	499	65.85	66.09	34.15	33.91

3. Other Presentations.

CLASSIFICATION.	1899.	1900.	INCREASE OR DECREASE IN 1900.	
			Amount.	Prct.
Smallest No. of persons employed..	469	427	—	8.96
Greatest No. of persons employed..	817	755	—	7.59
Average No. of persons employed..	627	572	—	8.77
Average yearly earnings	\$285 69	\$299 10	+	4.69
Average time in operation, days....	293	276	—	5.80
No. of private firms	1	1	.....	.....
No. of male partners	1	1	.....	.....
No. of female partners .....	.....	.....	.....	.....
Total No. of partners	1	1	.....	.....
No. of corporations	2	2	.....	.....
No. of male stockholders	11	12	+	9.09
No. of female stockholders	2	2	.....	.....
Total No. of stockholders	13	14	+	7.69
Total No. of partners and stockholders	14	15	+	7.14
Amount of capital invested	\$466,489 22	\$450,207 41	—	3.49
Value of goods made or work done..	708,752 18	724,672 36	+	2.25
Amount paid as wages	179,127 42	171,085 46	—	4.49
Av. capital to each person employed	743 05	787 08	+	5.93
Av. product to each person employed	1,130 39	1,266 91	+	12.08

MANUFACTURERS' RETURNS.

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MANUFACTURERS' RETURNS, 1899-1900.

TOYS AND GAMES—6 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1899.				1900.			
	MALE.	FE-MALE.	TOTAL.		MALE.	FE-MALE.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	220	45	265	38.65	142	26	168	30.22
\$5.00 but under \$6.00	60	.....	60	8.30	45	1	46	8.27
6.00 but under 7.00	202	.....	202	27.94	182	.....	182	32.73
7.00 but under 8.00	69	.....	69	9.54	61	.....	61	10.97
8.00 but under 9.00	24	.....	24	3.32	36	.....	36	6.47
9.00 but under 10.00	39	.....	39	5.39	17	.....	17	3.06
10.00 but under 12.00	31	.....	31	4.29	22	.....	22	3.96
12.00 but under 15.00	20	.....	20	2.77	13	.....	13	2.34
15.00 but under 20.00	10	.....	10	1.38	9	.....	9	1.62
20.00 and over	3	.....	3	.42	2	.....	2	.38
Totals	678	45	723	100.00	529	27	556	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1899.	1900.	1899.	1900.	1899.	1900.
January	517	590	73.96	98.82	26.04	1.18
February	550	595	78.68	99.66	21.32	.34
March	560	597	80.11	100.00	19.89	.....
April	580	542	82.98	90.79	17.02	9.21
May	533	533	76.25	89.28	23.75	10.72
June	536	530	76.68	88.78	23.32	11.22
July	631	527	90.27	88.27	9.73	11.73
August	676	546	96.71	91.46	3.29	8.54
September	677	566	96.85	94.81	3.15	5.19
October	689	563	98.57	94.30	1.43	5.70
November	699	574	100.00	96.14	.....	3.86
December	647	544	92.56	91.12	7.44	8.88

3. Other Presentations.

CLASSIFICATION.	1899.	1900.	INCREASE OR DECREASE IN 1900.	
			Amount.	Pct.
Smallest No. of persons employed..	517	527	+	10
Greatest No. of persons employed..	699	597	-	102
Average No. of persons employed..	608	559	-	49
Average yearly earnings	\$255 75	\$287 45	+	\$31 70
Average time in operation, days....	262	281	+	19
No. of private firms	3	3	.....	.....
No. of male partners	6	5	-	1
No. of female partners	2	.....	-	2
Total No. of partners	8	5	-	3
No. of corporations	2	2	.....	.....
No. of male stockholders	6	7	+	1
No. of female stockholders	1	3	+	2
Total No. of stockholders	7	10	+	3
Total No. of partners and stockholders	15	15	.....	.....
Amount of capital invested	\$569,101 17	\$573,561 78	+	\$4,460 61
Value of goods made or work done.	524,972 60	542,824 57	+	17,851 97
Amount paid as wages	155,497 44	160,696 45	+	5,189 01
Av. capital to each person employed	936 02	1,026 05	+	90 03
Av. product to each person employed	863 44	971 06	+	107 62

1 establishment did not report as to kind of management and No. of partners.

MANUFACTURERS' RETURNS, 1899-1900.
TRUNKS AND VALISES—9 ESTABLISHMENTS.
 1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1899.				1900.			
	MALE.	FE- MALE.	TOTAL.		MALE.	FE- MALE.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	196	125	321	37.11	172	147	319	35.60
\$5.00 but under \$6.00	57	37	94	10.87	54	40	94	10.49
6.00 but under 7.00	50	11	61	7.06	53	16	69	7.70
7.00 but under 8.00	93	.....	93	10.76	89	.....	89	9.93
8.00 but under 9.00	67	.....	67	7.75	93	.....	94	10.49
9.00 but under 10.00	71	1	72	8.31	75	1	76	8.48
10.00 but under 12.00	73	1	74	8.56	80	.....	80	8.93
12.00 but under 15.00	58	.....	58	6.71	48	.....	48	5.36
15.00 but under 20.00	20	.....	20	2.31	23	.....	23	2.57
20.00 and over	5	.....	5	.58	4	.....	4	.45
Totals	690	175	865	100.00	691	205	896	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1899.	1900.	1899.	1900.	1899.	1900.
January	771	779	92.22	92.08	7.78	7.92
February	793	806	94.86	95.27	5.14	4.73
March	827	838	98.92	99.05	1.08	.95
April	826	840	98.80	99.29	1.20	.71
May	836	841	100.00	99.53	.....	.47
June	827	844	98.92	99.76	1.08	.24
July	818	831	97.85	98.23	2.15	1.77
August	812	833	97.13	98.46	2.87	1.54
September	834	846	99.76	100.00	.24	.....
October	800	818	95.69	96.69	4.31	3.31
November	784	798	93.78	94.33	6.22	5.67
December	760	773	90.91	91.37	9.09	8.63

3. Other Presentations.

CLASSIFICATION.	1899.	1900	INCREASE OR DECREASE IN 1900.		
			Amount.	Pct.	
Smallest No. of persons employed..	760	773	+	13	1.71
Greatest No. of persons employed..	836	846	+	10	1.20
Average No. of persons employed..	807	821	+	14	1.73
Average yearly earnings	\$304 07	\$321 28	+	\$17 21	5.66
Average time in operation, days....	296	290	—	6	2.03
No. of private firms	1	1	.....	.....	.....
No. of male partners	3	3	.....	.....	.....
No. of female partners .....	.....	.....	.....	.....	.....
Total No. of partners	3	3	.....	.....	.....
No. of corporations	8	8	.....	.....	.....
No. of male stockholders	56	52	—	4	7.14
No. of female stockholders	16	18	+	2	13.13
Total No. of stockholders	72	70	—	2	2.78
Total No. of partners and stockholders	75	73	—	2	2.67
Amount of capital invested	\$1,087,341 27	\$1,092,864 57	+	\$5,523 30	.51
Value of goods made or work done.	1,289,185 47	1,385,905 38	+	96,719 91	7.50
Amount paid as wages	246,383 15	263,770 64	+	18,387 49	7.49
Av. capital to each person employed	1,347 89	1,331 14	—	16 25	1.22
Av. product to each person employed	1,597 50	1,688 07	+	90 57	5.67

MANUFACTURERS' RETURNS.

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MANUFACTURERS' RETURNS, 1899-1900.

VENEER—8 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1899.				1900.			
	MALE	FE-MALE.	TOTAL.		MALE	FE-MALE.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	103	.....	103	19.18	56	.....	56	10.71
\$5.00 but under \$6.00	19	.....	19	3.54	39	.....	39	7.46
6.00 but under 7.00	85	.....	85	15.83	71	.....	71	13.57
7.00 but under 8.00	110	.....	110	20.00	163	.....	163	31.17
8.00 but under 9.00	77	.....	77	14.34	78	.....	78	14.91
9.00 but under 10.00	50	.....	50	9.31	61	.....	61	11.66
10.00 but under 12.00	50	.....	50	9.31	25	.....	25	4.78
12.00 but under 15.00	32	.....	32	5.96	25	.....	25	4.78
15.00 but under 20.00	11	.....	11	2.05	5	.....	5	.....
20.00 and over .....	.....	.....	.....	.....	.....	.....	.....	.....
Totals	537	.....	537	100.00	523	.....	523	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1899.	1900.	1899.	1900.	1899.	1900.
January	368	339	71.46	70.33	28.54	29.67
February	392	377	76.12	78.22	23.88	21.78
March	457	420	88.74	87.14	11.26	12.86
April	510	431	89.03	89.42	.97	10.58
May	494	430	86.92	89.21	4.08	10.79
June	515	442	100.00	91.70	.....	8.30
July	504	446	97.67	92.53	2.33	7.47
August	491	482	95.34	100.00	4.66	.....
September	477	463	92.62	96.06	7.38	3.94
October	457	433	88.74	89.83	11.26	10.17
November	360	392	69.90	81.33	30.10	18.67
December	358	374	69.61	77.59	30.49	22.41

3. Other Presentations.

CLASSIFICATION.	1899.	1900.	INCREASE OR DECREASE IN 1900.		
			Amount.	Pct.	
Smallest No. of persons employed..	358	339	—	19	5.31
Greatest No. of persons employed..	515	482	—	33	6.41
Average No. of persons employed..	449	419	—	30	6.68
Average yearly earnings	\$311 31	\$315 15	+	38 84	12.48
Average time in operation, days....	282	282	.....	.....	.....
No. of private firms	3	3	.....	.....	.....
No. of male partners	4	4	.....	.....	.....
No. of female partners .....	.....	.....	.....	.....	.....
Total No. of partners	4	4	.....	.....	.....
No. of corporations	5	5	.....	.....	.....
No. of male stockholders	31	29	—	2	6.45
No. of female stockholders	2	3	+	1	50.00
Total No. of stockholders	33	32	—	1	3.03
Total No. of partners and stockholders	37	36	—	1	2.70
Amount of capital invested.....	\$247,804 87	\$290,349 82	+	\$42,544 95	17.17
Value of goods made or work done.	552,871 06	586,300 98	+	33,429 92	6.05
Amount paid as wages	139,776 65	146,715 81	+	6,939 16	4.96
Av. capital to each person employed	551 90	692 96	+	141 06	25.56
Av. product to each person employed	1,231 34	1,399 28	+	167 94	13.64

MANUFACTURERS' RETURNS, 1899-1900.

WAGONS-55 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1899.				1900.			
	MALE.	FE-MALE.	TOTAL.		MALE.	FE-MALE.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	151	22	173	5.39	141	21	162	5.84
\$5.00 but under \$6.00	79	1	80	2.49	71	1	72	2.87
6.00 but under 7.00	215	7	222	6.92	198	6	204	6.72
7.00 but under 8.00	497	10	507	15.80	453	11	464	15.29
8.00 but under 9.00	270	8	278	8.67	353	.....	353	10.97
9.00 but under 10.00	605	5	610	19.01	563	6	569	18.88
10.00 but under 12.00	465	1	466	14.53	425	.....	425	14.00
12.00 but under 15.00	587	2	589	18.36	514	.....	514	16.93
15.00 but under 20.00	235	1	236	7.36	243	.....	243	8.17
20.00 and over	47	.....	47	1.47	55	.....	55	1.48
Totals	3,115	57	3,208	100.00	2,891	44	3,035	100.00

2. Number of Persons Employed, Range of Employment-By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF-			
			Employment.		Unemployment.	
			1899.	1900.	1899.	1900.
January	2,639	2,804	92.34	96.49	7.66	3.51
February	2,665	2,806	93.26	96.56	6.74	3.44
March	2,776	2,806	97.47	100.00	2.53	.....
April	2,819	2,881	99.02	99.14	.98	.86
May	2,847	2,811	100.00	96.73	.....	3.27
June	2,809	2,813	98.67	96.80	1.33	3.20
July	2,799	2,768	98.31	95.25	1.69	4.75
August	2,706	2,626	95.04	90.36	4.96	9.64
September	2,624	2,551	92.17	87.77	7.83	12.23
October	2,688	2,518	94.41	86.65	5.59	13.35
November	2,730	2,572	95.89	88.50	4.11	11.50
December	2,783	2,689	98.10	92.53	1.90	7.47

3. Other Presentations.

CLASSIFICATION.	1899.	1900.	INCREASE OR DECREASE IN 1900.		
			Amount.	Pct.	
Smallest No. of persons employed..	2,624	2,518	—	106	4.04
Greatest No. of persons employed..	2,847	2,906	+	59	2.07
Average No. of persons employed..	2,740	2,729	—	11	.40
Average yearly earnings	\$450 66	\$440 61	—	\$10 05	2.23
Average time in operation, days....	300	296	—	4	1.33
No. of private firms	39	38	—	1	2.56
No. of male partners	59	56	—	3	5.09
No. of female partners	3	4	+	1	33.33
Total No. of partners	62	60	—	2	3.23
No. of corporations	16	17	+	1	6.25
No. of male stockholders	303	243	—	60	19.80
No. of female stockholders	65	106	+	41	62.73
Total No. of stockholders	368	349	—	19	5.16
Total No. of partners and stockholders	420	409	—	11	2.62
Amount of capital invested	\$5,850,957 62	\$5,901,092 86	+	\$50,135 24	.85
Value of goods made or work done.	5,419,507 66	5,713,099 67	+	293,591 91	5.39
Amount paid as wages	1,284,809 42	1,202,427 71	—	82,381 71	6.42
Av. capital to each person employed	2,135 39	2,162 36	—	26 97	1.26
Av. product to each person employed	1,977 92	2,093 48	+	115 56	5.85

MANUFACTURERS' RETURNS, 1899-1900.

WOODENWARE-9 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1899.				1900.			
	MALE.	FE- MALE.	TOTAL.		MALE.	FE- MALE.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	248	.....	248	16.04	104	.....	104	6.81
\$5.00 but under \$6.00	48	.....	48	3.10	81	.....	81	5.32
6.00 but under 7.00	132	.....	132	8.54	126	.....	126	8.23
7.00 but under 8.00	348	.....	348	22.51	379	.....	379	24.92
8.00 but under 9.00	422	.....	422	27.29	440	.....	440	28.82
9.00 but under 10.00	173	.....	173	11.18	227	.....	227	14.93
10.00 but under 12.00	72	.....	72	4.59	83	.....	83	5.46
12.00 but under 15.00	48	.....	48	3.10	23	.....	23	1.51
15.00 but under 20.00	42	.....	42	2.72	44	.....	44	2.90
20.00 and over	13	.....	13	.85	14	.....	14	.92
Totals	1,546	.....	1,546	100.00	1,521	.....	1,521	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1899.	1900.	1899.	1900.	1899.	1900.
January	1,415	1,481	92.67	99.79	7.33	.21
February	1,423	1,460	93.19	98.38	6.81	1.62
March	1,502	1,447	98.36	97.61	1.64	2.49
April	1,469	1,466	96.47	98.79	3.53	1.21
May	1,489	1,456	97.57	98.06	2.43	1.94
June	1,503	1,478	98.43	99.59	1.57	.41
July	1,485	1,462	97.25	98.52	2.75	1.48
August	1,520	1,484	99.54	100.00	.46	.....
September	1,490	1,455	97.58	98.05	2.43	1.95
October	1,527	1,451	100.00	97.77	.....	2.23
November	1,503	1,437	98.43	96.83	1.57	3.17
December	1,513	1,422	99.08	95.82	.92	4.18

3. Other Presentations.

CLASSIFICATION.	1899.	1900.	INCREASE OR DECREASE IN 1900.	
			Amount.	Pct.
Smallest No. of persons employed..	1,415	1,422	+	7 .49
Greatest No. of persons employed..	1,527	1,484	—	43 2.82
Average No. of persons employed..	1,487	1,458	—	29 1.95
Average yearly earnings	\$320 90	\$328 29	+	\$7 39 2.30
Average time in operation, days....	274	276	+	2 .78
No. of private firms	2	2	.....	.....
No. of male partners	2	2	.....	.....
No. of female partners .....	.....	.....	.....	.....
Total No. of partners	2	2	.....	.....
No. of corporations	7	7	.....	.....
No. of male stockholders	31	31	.....	.....
No. of female stockholders	4	4	.....	.....
Total No. of stockholders	35	35	.....	.....
Total No. of partners and stockholders	37	37	.....	.....
Amount of capital invested.....	\$847,073 13	\$870,368 91	+	\$23,295 78 2.75
Value of goods made or work done.	1,872,025 53	1,799,378 04	—	72,647 54 3.98
Amount paid as wages	487,170 86	478,644 48	—	8,526 38 1.76
Av. capital to each person employed	569 65	598 27	+	28 62 4.87
Av. product to each person employed	1,258 93	1,234 14	—	24 79 1.97

MANUFACTURERS' RETURNS, 1899-1900.
WOOLEN AND WORSTED GOODS—17 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1899.				1900.			
	MALE.	FE- MALE.	TOTAL.		MALE.	FE- MALE.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	101	355	456	41.08	103	360	463	41.56
\$5.00 but under \$6.00	22	65	87	7.34	24	58	82	7.38
6.00 but under 7.00	101	61	162	14.60	101	68	169	15.18
7.00 but under 8.00	70	33	103	9.28	85	63	148	13.29
8.00 but under 9.00	29	32	61	5.50	39	18	57	5.12
9.00 but under 10.00	69	44	113	10.18	53	28	81	7.27
10.00 but under 12.00	39	1	40	3.60	33	11	44	3.94
12.00 but under 15.00	43	4	47	4.23	30	.....	30	2.69
15.00 but under 20.00	31	.....	31	2.79	29	.....	29	2.60
20.00 and over	10	.....	10	.90	11	.....	11	.99
Totals	515	595	1,110	100.00	508	606	1,114	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
			1899.	1900.	1899.	1900.
January	973	1,077	90.34	93.90	9.66	1.10
February	953	1,081	88.49	99.27	11.51	.73
March	971	1,089	90.16	100.00	9.84	.....
April	991	1,076	92.01	98.81	7.99	1.19
May	994	1,067	92.29	97.06	7.71	2.94
June	883	946	82.00	86.87	18.00	13.13
July	1,011	1,041	93.87	95.59	6.13	4.41
August	1,021	1,004	94.80	92.19	5.20	7.81
September	1,044	990	96.94	90.90	3.06	9.10
October	1,077	975	100.00	89.53	.....	10.47
November	1,058	903	98.24	82.92	1.76	17.08
December	1,028	927	95.45	85.12	4.55	14.88

3. Other Presentations.

CLASSIFICATION.	1899.	1900.	INCREASE OR DECREASE IN 1900.	
			Amount.	Pct.
Smallest No. of persons employed..	883	903	+	20 2.27
Greatest No. of persons employed..	1,077	1,089	+	12 1.11
Average No. of persons employed..	1,000	1,014	+	14 1.40
Average yearly earnings	\$303 54	\$309 80	+	\$6 26 2.06
Average time in operation, days....	284	278	-	6 2.11
No. of private firms	5	5	.....	.....
No. of male partners	7	8	+	1 14.29
No. of female partners .....	.....	.....	.....	.....
Total No. of partners	7	8	+	1 14.29
No. of corporations	11	11	.....	.....
No. of male stockholders	78	80	+	2 2.57
No. of female stockholders	27	24	-	3 11.11
Total No. of stockholders	105	104	-	1 .96
Total No. of partners and stockholders	112	112	.....	.....
Amount of capital invested	\$1,625,058 62	\$1,747,938 93	+	\$122,880 31 7.50
Value of goods made or work done.	1,832,940 92	1,992,919 55	+	159,978 63 8.73
Amount paid as wages	363,539 29	314,137 11	+	10,597 82 3.49
Av. capital to each person employed	1,625 06	1,723 81	+	98 75 6.07
Av. product to each person employed	1,832 94	1,965 40	+	132 46 7.23

1 establishment did not report as to kind of management and No. of partners.

MANUFACTURERS' RETURNS.

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ALL INDUSTRIES.
SUMMARIES OF THE FOREGOING 46 INDUSTRIES.
Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1899				1900			
	MALE.	FE-MALE.	TOTAL.		MALE.	FE-MALE.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	8,020	9,128	17,149	17.71	7,202	8,615	15,817	16.23
\$5.00 but under \$6.00	2,609	2,362	4,971	5.13	2,489	2,631	5,120	5.26
6.00 but under 7.00	6,976	919	7,895	8.15	5,996	1,182	7,177	7.36
7.00 but under 8.00	10,396	630	10,926	11.28	9,976	577	10,552	10.83
8.00 but under 9.00	11,093	274	11,367	11.74	12,063	291	12,344	12.67
9.00 but under 10.00	15,352	214	15,566	16.08	15,983	237	16,220	16.65
10.00 but under 12.00	11,285	135	11,420	11.79	12,079	142	12,221	12.54
12.00 but under 15.00	9,382	33	9,415	10.34	10,021	36	10,056	10.32
15.00 but under 20.00	5,666	3	5,669	5.85	6,910	2	6,912	6.07
20.00 and over	1,857	3	1,860	1.93	2,030	1	2,031	2.08
Totals	83,236	13,601	96,837	100.00	83,737	13,713	97,450	100.00

Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1899.	1900.	1899.	1900.	1899.	1900.
January	71,301	77,379	84.79	93.46	15.21	6.54
February	72,942	78,173	86.74	94.42	13.26	5.58
March	76,267	79,687	89.50	96.26	10.50	3.72
April	78,575	81,514	93.43	98.46	6.57	1.54
May	82,131	82,639	97.66	99.82	2.34	.18
June	83,111	82,792	98.83	100.00	1.17	.....
July	83,547	80,777	99.34	97.57	.66	2.43
August	84,096	81,585	100.00	98.54	.....	1.46
September	83,361	81,424	99.11	98.35	.89	1.66
October	82,548	80,713	98.16	97.49	1.84	2.51
November	82,006	79,455	97.51	96.97	2.49	4.03
December	79,571	75,770	94.62	91.53	5.38	8.48

Other Presentations.

CLASSIFICATION.	1899.	1900.	INCREASE OR DECREASE IN 1900.	
			Amount.	Pct.
Smallest No. of persons employed	71,301	75,770	+ 4,469	+ 6.27
Greatest No. of persons employed	84,096	82,792	- 1,304	- 1.55
Average No. of persons employed	79,871	80,159	+ 288	+ 0.36
Average yearly earnings	\$394 58	\$411 48	+ 16.90	+ 4.28
Av. time in operation, days	280	277	- 3	- 1.20
No. of private firms	571	557	- 14	- 2.45
No. of male partners	1,029	934	- 97	- 9.43
No. of female partners	55	43	- 12	- 21.82
Total No. of partners	1,084	977	- 107	- 9.87
No. of corporations	551	569	+ 18	+ 3.27
No. of male stockholders	9,483	12,882	+ 3,394	+ 35.77
No. of female stockholders	1,809	2,440	+ 631	+ 34.88
Total No. of stockholders	11,297	15,322	+ 4,025	+ 35.63
Total No. of partners and stockholders	12,381	16,299	+ 3,918	+ 31.65
Amount of capital invested....	\$172,179,926 09	\$179,415,635 38	+ \$7,235,709 29	+ 4.20
Value of goods made or work done	193,555,784 97	209,942,633 59	+ 16,386,848 62	+ 8.46
Amount paid as wages	31,515,194 38	32,983,768 79	+ 1,468,574 41	+ 4.66
Av. capital to each person employed	2,155 73	2,238 25	+ 82 52	+ 3.83
Av. product to each person employed	2,423 36	2,619 08	+ 195 72	+ 8.08

ANALYSIS.

In the preceding pages are found statistical presentations covering 46 manufacturing industries in this state. These presentations were compiled from returns, or reports, from 1,152 separate establishments. One page has been devoted to the facts for each industry, and one additional page to those for all industries when combined. There are thus 47 tables, one for each industry and one for all industries, covering that many pages. The returns covered the business or financial years 1899 and 1900 and for both years were obtained from identical establishments.

Each table includes first the facts, in totals and averages, which were compiled directly from the returns, and second numerous comparisons and calculations drawn from these facts. The tables therefore contain not only the basic data, but certain analysis of this data. The importance of this method is readily seen when it is remembered that the value of statistics largely consist in the comparisons which they make possible. The analysis in the tables, however, owing to the lack of space, could not be carried as far as desirable or as far as the basic data warrant. For this reason it was thought advisable to continue the analysis under the above head.

CLASSIFIED WEEKLY EARNINGS.

The tables may be said to be divided into three parts, the first of which relates to classified weekly earnings. The wage receiving class is by far the largest of all the classes who take part in production and share in the products. In fact, those who are employed for wages in our manufacturing industries together with those who directly depend upon their earnings for a living outnumber several times all other persons who are in some way connected with these institutions. As the wage earners are the most numerous so the amount paid as wages is also greater than the share which goes to any of the other classes who take part in production. The amount required to meet interest charges is often considerable, but it is not to be compared to that which goes

to pay for the labor employed. Profits, salaries, depreciation and other expenses also foot up to respectable sums, but usually fall a good deal below wages. While wages is the biggest of all the items of expense, when considered as a whole, the amount of wages that goes to each worker is usually much smaller than that which goes to each person among those who receive salaries, interest, or profit. Those who furnish the capital more often belong to the wealthier classes. Salaried officers receive much greater compensation for their services than mechanics and laborers. The party who brings these forces together and takes the profits often pockets a handsome sum. Each receives more than he who works by the day in the shop. The amount which goes to each of a large proportion of those who are employed at common labor certainly seems small.

It is because the earnings, when compared with the wants, are small that the wage question has arisen. There are occupations where the competition among the workers for employment has resulted in so lowering the rate of wages that the amount earned can hardly be called a living wage. Happily such instances are not very numerous. At the same time there is no question but that wants of the working classes are increasing much more rapidly than their earnings. This in turn causes restlessness and dissatisfaction. It results in frictions and disputes. The workers at least believe that their share of the common products is smaller than that to which they are justly entitled. They endeavor by individual and concerted actions to remedy this, to better their conditions. These efforts often end in industrial struggles and strikes that are injurious to all. It is with earnings of those whose condition have become a social question that these tables deal.

The information conveyed, however, is limited to earnings. No attempts have been made to show whether they receive their just share or whether they earn enough to satisfy all reasonable wants. To throw any real light upon such problems as this would require a more far-reaching investigation than this, and to solve them would require greater wisdom than any so far employed to that end. The main purpose of these investigations is to show the earnings from year to year. This purpose does

not sound big. Perhaps it is not. The efforts may not be worth the cost. The fact, however, remains that without knowledge, there is no solution. Intelligent efforts to improve the conditions of the wage-earners are out of the question until their present condition is known. The vital point in their condition is their earnings. Facts which sets forth these earnings can therefore not be entirely without value.

The table which follows deals with the weekly earnings of the mechanics, operatives and laborers who were employed in the manufacturing industries during the period covered. It shows the classes into which the earnings were divided and the number of persons in each of these classes. The classifications in the table have even been extended so as to show the earnings for males and females separately. The table is important and worthy of the closest study.

NUMBER OF PERSONS RECEIVING CLASSIFIED WEEKLY EARNINGS
IN 1899 AND 1900.

CLASSIFIED WEEKLY EARNINGS.	1899			1900		
	Male.	Female.	Total.	Male.	Female.	Total.
Under \$5.00	8,021	9,128	17,149	7,202	8,615	15,817
\$5.00 but under \$6.00	2,609	2,362	4,971	2,489	2,631	5,120
6.00 but under 7.00	6,976	919	7,895	5,996	1,182	7,177
7.00 but under 8.00	10,396	530	10,926	9,975	577	10,552
8.00 but under 9.00	11,093	274	11,367	12,053	291	12,344
9.00 but under 10.00	15,352	214	15,566	15,983	237	16,220
10.00 but under 12.00	11,285	135	11,420	12,079	142	12,221
12.00 but under 15.00	9,982	33	10,015	10,021	35	10,056
15.00 but under 20.00	5,665	3	5,668	5,910	2	5,912
20.00 and over	1,857	3	1,860	2,030	1	2,031
Totals	83,236	13,601	96,837	83,737	13,713	97,450
Per cent	85.95	14.05	100.00	85.93	14.07	100.00

The preceding table shows the number of persons who received less than \$5.00 per week; the number who received \$5.00 per week, but less than \$6.00; the number who received \$6.00, but less than \$7.00 and so on. These facts are shown for both years and for males and females separately. The table as a whole offers many opportunities for a close and effective study of the earnings of those who are employed in factories. As the figures for the two years are given, the changes which took place as between them may also be followed up and studied.

In order to afford still better opportunities for comparison the facts in the above table have been reduced to four classes only, and in this form are presented as follows:

CLASSIFICATION.	1899			1900		
	Males.	Females.	Total.	Males.	Females.	Total.
\$9.00 and over	44,141	388	44,529	46,623	417	46,440
7.00 and over	66,630	1,192	66,822	68,051	1,285	69,336
6.00 and over	72,606	2,111	74,717	74,046	2,467	76,513
Under \$6.00	10,630	11,490	22,120	9,690	11,245	20,937

Here we find the number of persons who received \$9.00, \$7.00, \$6.00, per week and over, respectively, and also the number who received less than \$6.00 per week.

Reduced to the above form, the figures may be more easily compared and analyzed. In the first place, the classifications have been reduced to about two-thirds of their former size, thus lessening the number of comparisons necessary and enabling definite results to be much more quickly obtained. In studying figures of this nature the number of difficulties in the way are usually in proportion to the number of the facts that must be considered and the comparisons that must be instituted. Then again the classifications in the condensed table were, as far as possible, adjusted so as to correspond to the amount actually received by the greatest number. From actual experience it is well known that those who receive such sums per day as \$1.50, \$1.25, \$1.00, etc., greatly out-number those who receive any sum between these amounts. In compiling the preceding table these facts received special consideration and it is believed that a classification of earnings based upon them cannot fail to be of some value.

In comparing the total number of persons employed as between the two years, the following facts are developed:

The total number of persons employed in 1899 was 96,837, and of these 83,236 were males and 13,601 were females.

The total number employed in 1900 was 97,450, of which 83,737 were males and 13,713 were females.

Between the two years there was thus an increase of 501 males and of 112 females, or in all of 613 persons.

In order to still further facilitate comparisons and enhance the value of the figures, the per cent. relation which the number in each earnings-class bear to the total number employed, has been ascertained and presented in the following table:

PER CENT. OF PERSONS RECEIVING CLASSIFIED WEEKLY EARNINGS
IN 1899 AND 1900.

CLASSIFIED WEEKLY EARNINGS.	1899			1900		
	Male. Per cent.	Female. Per cent.	Total. Per cent.	Male. Per cent.	Female. Per cent.	Total. Per cent.
Under \$5.00	9.64	67.11	17.70	8.60	62.82	16.23
\$5.00 but under \$6.00	3.13	17.37	5.13	2.97	19.19	5.25
6.00 but under 7.00	8.38	6.76	8.15	7.16	8.62	7.36
7.00 but under 8.00	12.49	3.90	11.28	11.91	4.21	10.83
8.00 but under 9.00	13.33	2.02	11.77	14.39	2.12	12.67
9.00 but under 10.00	18.44	1.57	16.07	19.09	1.72	16.65
10.00 but under 12.00	13.56	.99	11.79	14.43	1.04	12.54
12.00 but under 15.00	11.99	.24	10.34	11.97	.25	10.32
15.00 but under 20.00	6.81	.02	5.85	7.06	.02	6.07
20.00 and over	2.23	.02	1.92	2.42	.01	2.08
Totals	100.00	100.00	100.00	100.00	100.00	100.00

The next preceding table deals with percentages. For the males, females, and the total of both it shows the per cent. of the number in each class.

This table is interesting. It discloses the relation of those in each class to the whole and therefor bear much more forcibly upon the state of the earnings than any of the preceding tables. Take the columns for the total of both male and females as an instance and ascertain what they show. In the first place we find that in 1899, 17.70 per cent. of the total number employed received less than \$5.00 per week, while in the following year, or 1900, 16.23 per cent. received less than this amount. As between the two years there was thus a change of nearly one and one-half per cent. As this change represents a decrease for the latter year, we are justified in saying that the proportion who received under \$5.00 was smaller in 1900 than in the preceding year and that therefore the proportion who received more than this amount was correspondingly greater.

This is therefore an encouraging change. Moving downwards through the column until the class \$7.00 but under \$8.00 is reached, we find conditions about the same. In this class the proportion stood at 11.28 per cent. for the former and 10.83

for the latter year. Another move of two classes brings us to the class \$9.00 but under \$10.00, or to those who mostly receive \$1.50 per day, and whose earnings cannot exceed \$1.66 per day. In this case we find that the per cent. stood at 16.07 and 16.65 respectively for the two years. This means that a greater proportion earned this amount in 1900 than in 1899, also an encouraging sign. This increase for 1900 continues practically throughout all the higher classes. Between the two years, therefore, several changes occurred. While these changes cannot be exactly measured they indicate at least a slight increase in earnings and are therefore in the right direction.

In the other two columns those for the male and female, respectively, the same tendency may be observed. In the class under \$5.00 the change is most noticeable for the females. In this case the proportion who received less than \$5.00 decreased from 67.11 to 62.82 per cent. This decrease is certainly in the right direction and is again apparent by an increase in those who earned greater amounts. For the males, the changes are more even. In most classes, however, they can be readily noticed.

The table showing the number who received classified weekly earnings was condensed into fewer classes. The same process has also been applied to the above, the one giving percentages and for the same reasons. In the condensed forms the figures are more readily compared. The results of thus condensing the facts in the next preceding table are as follows:

CLASSIFICATION.	1899			1900		
	Male.	Female.	Total.	Male.	Female.	Total.
\$9.00 and over	53.03	2.87	46.05	54.96	3.04	47.64
7.00 and over	78.85	8.76	69.00	81.27	9.37	71.15
6.00 and over	87.24	15.62	77.16	88.43	17.99	78.62
Under \$6.00	12.77	84.48	22.84	11.57	82.01	21.48

Here we have the facts in the preceding table boiled down from ten to four classes. Here the order in which the wage classes come is also reversed. In the table from which it is compiled the lowest classes come first in order, here they come last. This is a change that should be borne in mind.

The table shows separately for males, females, and the total of

both the per cent. of persons who received \$9.00, \$7.00, and \$6.00 per week and over, respectively, as well as of those who received less than \$6.00 per week.

Considering the total for both males and females first, we find that in 1900, 47.64 per cent. of the whole received \$9.00 per week and over, as against 46.05 per cent. in 1899. This is an increase for 1900 of about 1.59 per cent. In the next class in order, that of \$7.00 and over, the percentage stood at 69.00 and 71.15 per cent., respectively, for the two years, an increase of 1.15 per cent. In \$6.00 and over, there was an increase from 77.16 to 78.52 per cent. or of 1.36 per cent., while those who received less than \$6.00 decreased 1.36 per cent. The increase for the highest class, the first in order, was thus fairly well maintained throughout for the other classes. It seems to have affected those in the lowest as well as those in the highest. The results here fully corroborate the conclusions which were drawn from the facts in the table preceding it.

As said this applies to all without regard to sex. In considering the facts for each sex separately the same upward tendency is noticeable. For males as well as for females the earnings seems to have grown larger. As to whether these two classes have shared alike in the general advance the figures do not exactly disclose. From the facts as they stand, however, it certainly appears that the women have held their own.

For the two years included the males who received \$9.00 and over constituted 53.03 and 54.96 per cent. respectively of the total; the males who received \$7.00 and over constituted 78.85 and 81.29 per cent. respectively; those who received \$6.00 and over 87.24 and 88.43 per cent. respectively; and those who received less than \$6.00, 12.77 and 11.57 per cent. respectively.

The proportion of the females who received \$9.00 and over was extremely small. In 1899 they constituted only 2.87 per cent., in 1900 3.04 per cent. For those receiving \$7.00 and over the proportion was 8.76 and 9.37 respectively; for those in the class \$6.00 and over it was 15.52 and 17.99; while for those under \$6.00 it stood 84.48 and 82.01 per cent. respectively. When the figures for 1899 are thus placed in comparison with those for 1900 the changes between the two years are easily seen.

The data relating to classified weekly earnings has thus been presented and compared. As to the presentations it can be said that they are fairly complete, especially in this so when the detailed tables are included. The comparisons, however, are more limited. Only such points were brought together and explained as were regarded as of the greatest importance. Outside of this the facts have been left to tell their own story. All generalizations have been omitted and few deductions are made. Considering the importance of this data together with the comprehensive ground it covers it is plain that it has not received the thorough analysis it deserves. The purpose here only was to call attention to the more important features. This has been done as briefly as possible.

Besides the weekly earnings the tables also show the proportion of male and female employees. This is an important presentation. Questions as to the number of women employed in factories and whether the proportion of women employees are gradually increasing are constantly asked. The only way in which these questions can be answered satisfactorily is through the collection and presentation, from year to year, of reliable data upon these points. This the bureau is doing. The first efforts in this line were made in 1896, and it has been continued every year since. The results show plainly what proportion of those employed in factories are females. If continued for a series of years they will also show whether this proportion is increasing.

The following table shows for the two years the proportion of male and female employees. These facts are given not only for each class but for the total number employed.

PER CENT. OF MALE AND FEMALE RECEIVING CLASSIFIED WEEKLY EARNINGS IN 1899 AND 1900.

CLASSIFIED WEEKLY EARNINGS.	1899			1900		
	Male. Per cent.	Female. Per cent.	Total. Per cent.	Male. Per cent.	Female. Per cent.	Total. Per cent.
Under \$5.00	46.77	53.23	100	45.53	54.47	100
\$5.00 but under \$6.00	52.48	47.52	100	48.61	51.39	100
6.00 but under 7.00	88.36	11.64	100	83.53	16.47	100
7.00 but under 8.00	95.15	4.85	100	94.53	5.47	100
8.00 but under 9.00	97.59	2.41	100	97.64	2.36	100
9.00 but under 10.00	98.63	1.37	100	98.54	1.46	100
10.00 but under 12.00	98.82	1.18	100	98.34	1.16	100
12.00 but under 15.00	99.67	.33	100	99.65	.35	100
15.00 but under 20.00	99.95	.05	100	99.97	.03	100
20.00 and over	99.84	.16	100	99.95	.05	100
Total	85.95	14.05	100	85.93	14.07	100

This table deals with the proportion of the males and females. It shows the respective per cent. of the two sexes not only in each class of earnings but of the total number employed.

As is plain the figures here were computed from those in the table showing, for the 46 industries, the number of persons who received classified weekly earnings and therefore represents "all industries."

Considering the totals first we find: That of the total, or 96,837 persons who received classified earnings in 1899, 85.95 per cent. were males and 14.05 per cent. were females. That of the total, or 97,450 persons who received classified earnings in 1900, 85.93 per cent. were males and 14.07 per cent. were females.

These figures can safely be regarded as representing the situation in the manufacturing industries in this state.

Since this is the case it can also be said that of those who are employed in our factories there are about seven men to one woman.

This table also throws much light upon the respective earnings of the males and females. As a rule women receive much less per week than men. This is not only well known, but is substantiated in this table. Thus we find that in the class under \$5.00, 53.23 per cent. of the total were females while the males constituted only 46.77 per cent. These figures are for 1899 and do not differ very much from those for 1900. This, the lowest class in point of earnings, is however, the only one in which the females were the most numerous. Even in the next class in order quite a change is noticed in this respect, though the females even here constitute nearly one-half. In the class \$6.00 but under \$7.00 the proportion of women had fallen to 11.64 and 16.47 per cent. respectively for the two years. This fall continues at nearly the same rate in the three succeeding classes and the proportion then dwindles into an insignificant figure. It is hardly necessary to say that the facts thus discussed represent all industries and are therefore not typical of any one industry.

Conditions vary with the industry. In some the earnings are comparatively speaking high, in others low. In some the proportion of women children is much greater than in others. Among the first conditions which make for high wages are skill

and physical exertion. Little skill and light work, whether occurring separately or together, means small pay. High skill and heavy labor means higher pay. Women and children are usually employed in occupations which require less skill and where the work is light and this is one of the reasons why they earn less. Of course there are women workers who are both skilled and efficient in their work, and also many who perform labor that would seem to be beyond their strength and who earn considerably above the average of their class, but such instances are met with less often. These facts are mentioned in order that those who may desire the facts for some particular industry will consult the table for that industry instead of that for all industries.

But conditions vary not only as between the different industries, but as between the same establishments in the same industry. This is well known. Some employers pay better wages and provide better conditions than others. The reasons for this are not easily explained. In some cases it is undoubtedly due to the character of the employer, while in others it may be found in superior managing ability and greater foresight. Local conditions may also have their effect in this respect. That all of these facts are true in actual experience is beyond dispute. Even in establishments in the same locality there is often considerable variation in the conditions which are provided for the workers. The figures for individual establishments, however, have not been presented, hence what has been said in this connection is not directly supported by the tables.

The facts thus presented clearly show that earnings increased during the period. This increase is also supported by the figures relating to yearly earnings and amount paid as wages as shown later on. Now what does this change mean? Did it result in improving the condition of the workers? These are questions that cannot be fully answered from the facts submitted alone. The condition of the employes depends upon the number of wants that are satisfied and the comforts secured from the amount earned. In other words, it is real wages rather than nominal wages that determines the standard of living. From this it is plain that an increase in earnings without a correspond-

ing increase in prices of the necessities and comforts of life would tend to better conditions. On the other hand it is also plain that if prices of these things increased as fast, or faster than earnings, conditions would remain the same or even grow worse. What then is the situation with regard to prices? Have they increased, remained stationary or decreased? The answers to these questions cannot be had except from a careful study of both wage and price schedules and the price schedules have not been included in the present investigation. This part is limited to a study of wage schedules only. It therefore supplies only one-half or a part of the material needed for an exhaustive study of conditions. That prices as well as earnings have increased during the period will hardly be denied. Common experience tells us this. As to the relative increase in two cases nothing has been shown. The above facts are merely mentioned in order that the data submitted may not lead to misleading conclusions.

NUMBER OF PERSONS EMPLOYED BY MONTHS.

The second part of the basic tables deal with the number of persons employed each month. As said in the introduction this number was ascertained by first adding together from the time books the number employed each week during the month and then dividing the sum obtained by the number of the weeks thus included for the month. The quotient which was obtained through this operation was regarded as the number employed for the month in question. That the figures in these tables which show how many persons were at work each month thus represent the average number need hardly be said.

The following table shows for 1899 and 1900 the number of persons employed each month throughout each year:

NUMBER OF PERSONS EMPLOYED EACH MONTH IN 1899-1900.

MONTHS.	NUMBER OF PERSONS EMPLOYED.	
	1899.	1900.
January	71,301	77,379
February	72,942	78,173
March	75,267	79,687
April	78,575	81,514
May	82,131	82,639
June	83,111	82,792
July	83,547	80,777
August	84,096	81,185
September	83,351	81,424
October	82,548	80,713
November	82,006	79,455
December	79,571	75,770
Average	79,871	80,159

In the preceding table is found the number of persons employed each month during the two years included.

In looking over this table many features bearing upon the situation during the period may be seen. Among other things the conditions appear to have been more even, or business less subject to fluctuations in 1900, than in the preceding year. The average number employed was also slightly greater the latter year.

From 1899, the smallest number, or 71,301, persons were employed in January, while for 1900, the greatest number, or 84,096 persons, are found in August. Between the two points there was thus a difference of 12,795 persons.

For 1900 the smallest and greatest number were employed in December and June, respectively. In the former case the number was 75,770 persons, in the latter 82,792 persons, a difference of 7,022 persons.

The variations as between the months were considerably greater in 1899. This is evident not only from the figures themselves, but also from the fact that the difference between the smallest and greatest number was 12,795 persons for that year, as against 7,022 persons in 1900. This indicates that production was more spasmodic or fluctuating in the former year.

In both cases employment was lightest during the first few months of the year, but for 1899 this fact is much more apparent. The first three months of that year show a smaller num-

ber than at any time the year following. As an off-set to this, however, the number during the four summer months was greater than those for any month in 1900. The revival of business which begun in the latter part of 1898, continued throughout the following year, though not without sharp changes. In 1900, the high level which was reached the preceding year was steadily maintained. These facts can be deducted from the figures and are in accord with general observation upon this matter.

The average number employed during the year was 79,871, in 1899, and 80,159, in 1900, a difference in favor of the latter year of 288 persons, or less than one-half of one per cent. This is also a slight indication of a more satisfactory state of business in the latter year.

From the figures in the preceding table have been computed the per cent. of employment and unemployment for each month during the two years and these facts are presented in the following table:

PER CENT. OF EMPLOYMENT AND UNEMPLOYMENT.

MONTHS.	PER CENT. OF EMPLOYMENT.		PER CENT. OF UNEMPLOYMENT.	
	1899.	1900.	1899.	1900.
January	84.79	93.46	15.21	6.54
February	86.74	94.42	13.26	5.58
March	89.50	96.25	10.50	3.75
April	93.43	98.46	6.57	1.54
May	97.66	99.82	2.34	.18
June	98.83	100.00	1.17	.....
July	99.34	97.57	.66	2.43
August	100.00	98.54	.....	1.46
September	99.11	98.35	.89	1.65
October	88.16	97.49	1.84	2.51
November	97.51	95.97	2.49	4.03
December	94.62	91.52	5.38	8.48
Average	94.98	96.82	5.02	3.18

The preceding table is concerned exclusively with the range of employment and unemployment, that is, with the proportion of the workers who had employment or were without employment during the different months each year. The figures in this table were computed from those in the one which precedes it, and the operation is simple. It consists simply of this: The number of persons for the month when the greatest number were employed was regarded as 100 per cent., while the number for each

of the other months were regarded in their per cent. of this. In other words, the highest number for any month was regarded as full employment, and the number for each of the other months as less than full employment in proportion to the difference between this number and the highest number. This may be illustrated by an example directly from the table. In 1899, the greatest number were employed in August. For this month there was therefore full employment. During each of the other months of the year a smaller number were employed and the proportion or per cent. relation which each of these smaller numbers bear to the highest number is regarded as the state of employment for that month. The difference between this per cent. and one hundred is regarded as the proportion who were unemployed. This explanation is not very clear, but a glance at the table itself will show what is meant.

Going back to the table we find that in 1899 the greatest number of persons were employed in August, while in 1900, June shows the greatest number. During these months there was therefore full employment. No other month during either year shows as many persons employed. In January, 1899, the number employed constituted 84.79 per cent. of those where employed in August of the same year. The balance between these two months were thus unemployed. In January, 1900, the number employed constituted 93.46 per cent. of those employed in June, which month showed the greatest number. The proportion who were unemployed in the first month of the year was thus 6.54 per cent. of the total.

January seems to be the dullest month. The number employed were then the smallest and the number unemployed the greatest. The range of unemployment, however, was much wider in 1899. In fact more than twice as many were then without work as in the same month in 1900. This is amply shown by the figures which places the unemployed at 15.21 and 6.54 per cent. respectively. In February, however, the unemployed had decreased considerably and this decrease continued up to the time each year when all were at work. From the highest point in August and June respectively there was again a gradual increase in the unemployed until the end of the year. The

course of unemployment therefore ran, from 15.21, and 6.54 per cent. respectively, as stated, up to full employment, then it gradually widened again until in December when it stood at 5.38 and 8.48 per cent. respectively.

These figures certainly throw a great deal of light upon the course of employment. They show the range for each month, and thus point out when the greatest as well as the smallest number were out of work. They also show that the number of the unemployed was much smaller in 1900 than in the preceding year. This fact is also borne out by the last figures in the table, those giving the averages. For these figures show that the number unemployed amounted to 5.02 per cent. in 1899 as against only 3.18 per cent. in 1900.

What value, if any, do these figures possess? This question has often been asked and discussed. Some claim and have attempted to prove that their value is small. While they admit that the figures constitute a fair index to the condition in the industry they may represent, they cannot throw much light upon the situation as a whole because all industries are not represented. This view has weight. It is based upon many facts that cannot be overlooked. As a general proposition there is only one way in which the absolute number of those who are unemployed at a given time can be ascertained, and that is by a completed census, including every industry and all kinds of employment. Such a census is possible though so costly that it cannot be undertaken by the bureau. But while all this is true there are still a good many reasons why the question should not be dismissed without an examination. Such an examination, however, it is not our intention to make. But attention will be called to a few of the facts that have a close bearing upon this matter.

Now what are the facts? In the first place most occupations are full if not overcrowded already. Those localities are few where the supply of workers do not, as a rule, exceed the demand. There is also a strong tendency to stick to the work which one has become familiar with. Once a factory hand, factory work is likely to be preferred, perhaps not always from choice, but from the force of circumstances. A change is always inconvenient. It may mean the learning of a new trade, a change of residence,

separation from family or friends. Few workers are making such changes unless forced to do so. In fact the tendency, artificial or natural, to stick to an occupation already entered is so strong that many persons prefer to remain idle during the quiet spell in their line rather than break in at something else. Depression in one line is also likely to be reflected in others. When workers in a large number are let out in any industry it is therefore unlikely that any considerable part of them can immediately find employment elsewhere. For these and other reasons it is very probable that the figures in these tables do not only show the condition in the industries which they directly represent but also that they throw much light upon the course of employment in general. The figures should therefore not be thrown aside without at least a thorough examination.

OTHER PRESENTATIONS.

The figures in the two first parts of the tables have now been considered and we are approaching the third part. The first part is devoted to weekly earnings, the second to persons employed. Both of these have been covered in the preceding pages. The third part appears under the head of "other presentations" and contains a most varied assortment of facts and calculations. This assortment, however, while varied comes entirely within the subject in hand as may be seen from the heads under which the facts are in a way sub-divided.

The facts under "other presentations" appear under four different sub-heads, or (a) under smallest, greatest, and average number of persons employed; (b) average yearly earnings and time in operation; (c) establishments and kind of management; (d) capital, product and wages, etc.

SMALLEST NUMBER OF PERSONS EMPLOYED.

By this is meant the number employed during that month each year when the smallest number of persons were employed.

As we have seen above and as we know from observation and other sources, the number of persons employed vary greatly from time to time. This is true not only of manufacturing industries

but of practically all undertakings where people are employed. The main reasons for this are found in the ups and downs in the course of business. When business is brisk there is a demand for help, when it falls off fewer persons are needed, and, as employers cannot afford to pay wages for any more help than they have employment for, those who are not needed are let out. This is an important fact from several points of view. It is the outward phenomena of one of the greatest industrial evils. Those who are laid off usually suffer from it. Most of them depend upon their earnings for a living and as a rule the earnings are not large enough to permit of much idleness. The off season is also apt to be felt by the employers as well. It is not a rare thing to find that some of them are even unable to make expenses while it lasts.

From the table for "all industries" it is found that the smallest number of persons employed each year stood as follows:

Smallest number in 1900.....	75,770
Smallest number in 1899.....	71,301
Excess for 1900	4,469
Per cent. of excess for 1900.....	6.27

The smallest number of persons employed was thus 75,770, in 1900, and 71,301 in 1899. This gives an excess to the former year of 4,469 persons, or 6.27 per cent.

In 1899, the smallest number were employed in January, in 1900 they are found in December. December to February inclusive are usually the quietest months in the manufacturing line. Of course there are individual industries which have their busy time in the winter, but these are comparatively few in number.

GREATEST NUMBER OF PERSONS EMPLOYED.

We have thus called attention to the smallest number employed. The next step will be to consider the greatest number.

By the greatest number of persons employed is meant the number for the month each year when the greatest number were employed.

These are the figures which represent full employment.

When there is full employment conditions in general are also, as a rule, favorable. The workers are then earning the biggest wages and are good consumers as well as producers. The employers are making profits and all are better satisfied. Unfortunately, however, these conditions are not always with us. They come, stay awhile, and then disappear. A period of uncertainty sets in. Conditions which inspired confidence are displaced by conditions which inspire only doubt. How labor fares during these changes is well known. No class suffers more in times of depression than the wage earning class. At the first real sign of adversity the first act is to restrict production or to let out the hands. When things begin to pick up they are not put to work until old stocks are worked off. But even in good times labor is more or less uncertain. This has been plainly illustrated in the preceding pages. During the period covered here times have been better than the average. Still considerable fluctuation in the number employed from month to month has been noticed. Between the smallest and greatest number there has been quite a range. Even at best conditions are such that a considerable portion must remain idle.

The causes of these industrial uncertainties are too numerous to mention. It is likely however, that if analyzed to their final point they would be found in the very imperfections of human nature. No one is infallible. The workers are not intelligent enough to guard their own interest. Precisely the same is true of the employers. Shrewd and farsighted as they may be they cannot always see far enough into the future to be able to tell what is going to happen. Few are also able to calculate with absolute certainty the effect of this or that policy, even for a single industry. The result is that those harmonious relations between production and consumption which are so necessary to stable conditions are constantly in danger of being disturbed. And once out of joint the break is sure to follow.

The following figures deal with the greatest number of persons employed for any month during the two years covered. As is plain, these facts also have been taken from the table for all industries.

Greatest number in 1899.....	84,096
Greatest number in 1900.....	82,792
Excess in 1899	1,304
Per cent. of excess	1.55

The above figures give the number of persons during the month each year when the greatest number were employed.

In 1899 the greatest number were employed in January, in 1900 in June. The number in the former case was 84,096, while in the latter it was 82,792. This means a decrease for 1900 of 1,304 persons, or 1.55 per cent.

While 1900 thus shows a decrease in the greatest number it had, as was seen above, a very decided increase the smallest number. As will be seen later the average number was also slightly greater for this year. On the whole therefore it can be said that the industrial conditions were rather better in 1900, than in the preceding year, at least as far as steady employment is concerned.

The table which follows gives for each industry in 1899 and 1900 the smallest number of persons employed together with month in which they were found, and the greatest number employed, together with the month when this number was found. The facts in each case have been taken from the tables for the respective industries. No calculations have been made upon the figures, and the table as a whole is merely a compilation of facts which appear elsewhere in this part. The reason for presenting it is to get these facts together into one place, in such form that the smallest and greatest number together with the months in which they occurred could be easily found. As to the importance of this table there is little to say. Perhaps it is not of any. It seemed, however, that there might be persons who would like to compare the facts given for the different industries. If this should be the case the arrangement of these facts in one table will certainly be of some convenience.

SMALLEST AND GREATEST NUMBER OF PERSONS EMPLOYED, TOGETHER WITH THE MONTH WHEN THEY WERE FOUND.

INDUSTRIES.	SMALLEST NO. PERSONS				GREATEST NO. PERSONS.			
	1899		1900.		1899.		1900.	
	Month.	No.	Month.	No.	Month.	No.	Month.	No.
Agricultural implements	Oct.	2,412	Sept.	1,466	Mar.	3,431	Feb.	3,581
Artisan tools	June	815	June	1,456	Feb.	1,251	Jan.	146
Beef and pork packing	Sept.	1,226	Apr.	1,131	Jan.	1,637	Jan.	1,756
Boots and shoes	May.	2,304	May.	2,199	Jan.	2,496	Mar.	2,542
Boxes, paper	Jan.	374	Jan.	383	Nov.	427	Dec.	428
Boxes, packing and cigars	Mar.	1,110	Feb.	1,140	Sept.	1,343	June	1,326
Brick, tile and sewer pipe	Jan.	71	Jan.	118	July	795	June	827
Brooms, etc	Dec.	169	Jan.	171	Aug.	259	July	215
Burial cases	Jan.	304	Jan.	356	Dec.	359	Dec.	380
Canning vegetable	Jan.	52	Jan.	46	July	1,423	July	1,448
Cement, lime and plaster	Jan.	233	Jan.	281	June	602	June	564
Cigars	Jan.	707	Feb.	733	Dec.	771	Nov.	819
Chairs	Mar.	2,951	Jan.	3,299	Feb.	3,438	Oct.	3,702
Clothing	Jan.	2,592	Dec.	2,913	Oct.	3,007	Oct.	3,142
Cooking and heating apparatus	Jan.	830	Dec.	930	Sept.	1,154	Nov.	1,781
Confectionery	Jan.	879	Mar.	1,111	Nov.	1,308	Nov.	1,529
Cooperage	Feb.	376	Jan.	377	May	442	Aug.	485
Cotton and linen goods	Jan.	484	Mar.	404	Nov.	477	Apr.	466
Electric and gas apparatus	Aug.	1,276	Aug.	1,151	May	1,439	Apr.	1,453
Flour and feed	Mar.	677	Mar.	670	Sept.	931	Nov.	770
Furs, gloves and mittens	Jan.	194	Jan.	217	Nov.	301	Nov.	328
Furniture	Jan.	2,763	July	2,381	May	3,027	Apr.	2,982
Iron, malleable	Jan.	4,133	Aug.	2,773	June	4,645	Jan.	4,577
Knit goods	Jan.	2,566	Jan.	2,732	Oct.	3,077	Aug.	3,278
Lager beer	Jan.	3,258	Dec.	3,355	Oct.	3,553	Sept.	3,773
Leather	Jan.	3,824	May	3,926	Dec.	4,424	Feb.	4,214
Lumber	Jan.	7,003	Dec.	7,655	July	12,639	Aug.	12,596
Machinery	Jan.	5,687	May	7,041	Nov.	7,186	June	7,238
Miscellaneous	July	1,623	Aug.	1,76	Mar.	2,347	Mar.	2,426
Office fixtures	Dec.	737	Jan.	672	Aug.	827	May	751
Paint	June	115	June	121	May	140	July	117
Paper and pulp	Jan.	2,931	Jan.	3,256	Dec.	3,456	Nov.	3,828
Saddlery	Sept.	166	Sept.	226	Dec.	238	Dec.	330
Sash, etc	Jan.	2,936	Jan.	2,811	Aug.	3,812	Nov.	3,707
Sheet metal goods	Jan.	1,850	June	1,461	Oct.	2,350	Oct.	2,003
Ship building	Aug.	668	Aug.	591	May	1,331	May	1,256
Soap, lye and potash	May	192	Dec.	162	Jan.	201	Jan.	191
Staves and heading	Oct.	239	Oct.	249	Apr.	463	Apr.	433
Stone	Feb.	118	Feb.	164	Sept.	419	Aug.	423
Straw goods	Nov.	469	June	427	Apr.	817	Apr.	755
Toys and games	Jan.	517	July	527	Nov.	699	Mar.	597
Trunks and valises	Dec.	760	Dec.	773	May	836	Sept.	846
Veneer	Dec.	358	Jan.	339	June	515	Aug.	482
Wagons	Sept.	2,624	Oct.	2,518	May	2,847	Mar.	2,906
Wooden ware	Jan.	1,415	Dec.	1,422	Oct.	1,527	Aug.	1,484
Woolen and worsted goods	June	853	Nov.	903	Oct.	1,077	Mar.	1,069

AVERAGE NUMBER OF PERSONS EMPLOYED.

The average number of persons employed was obtained by adding together the number for each month and dividing the sum thus obtained by the number of the months, or by twelve. This applies to the figures for each industry as well as to those for all industries.

The average number employed for all industries was as follows:

Average number in 1900.....	80,159
Average number in 1899.....	79,871
Excess in 1900.....	288
Per cent. of this excess.....	.36

In 1900 the average number of persons employed was 80,159, in 1899 it was 79,871. There was thus an increase for the year first mentioned of 288 persons amounting to .36 per cent.

The smallest, greatest and average number of persons employed have thus been given and this for several reasons. In the first place they give quite closely the extreme changes in employment; then again they point out a good many things concerning the industrial situation. They also throw some light on the employing capacity of the factories in this state.

These figures are of course of the greatest value when considered together. In that case those in one group act as a check upon those in the others. This is especially true of the averages. For this reason, and also because they measure the condition as between the two years, the figures giving the average number are also the most important.

The following table shows, by industries for the two years, the average number of persons employed together with the increase or decrease in 1900 as compared with 1899.

AVERAGE NUMBER OF PERSONS EMPLOYED IN 1899-1900.

INDUSTRIES.	No. of establishments.	AVERAGE NO. OF PERSONS EMPLOYED IN		INCREASE + DECREASE - IN 1900.	
		1899.	1:00.	Amount.	Per cent.
Agricultural implements	27	3,025	2,567	- 458	15.14
Artisans' tools	9	969	710	- 259	26.73
Beef and pork packing	9	1,400	1,401	+ 1	.07
Boots and shoes	28	2,427	2,414	- 7	.29
Boxes, paper	6	408	399	- 9	2.21
Boxes, packing and cigars	29	1,263	1,248	- 15	1.19
Brick, tile and sewer pipe	32	441	454	+ 13	2.95
Brooms, etc.	18	209	213	+ 4	1.91
Burial cases	3	353	358	+ 5	1.13
Canning, vegetable	16	465	444	- 21	4.52
Cement, lime and plaster	12	443	434	- 9	2.03
Cigars	48	786	789	+ 3	7.20
Chairs	12	3,177	3,529	+ 352	11.08
Clothing	29	2,829	3,061	+ 232	8.20
Cooking and heating apparatus	5	1,045	1,057	+ 12	1.15
Confectionery	13	1,076	1,306	+ 230	21.37
Cooperage	17	415	394	- 21	5.06
Cotton and linen goods	6	469	443	- 26	5.54
Electric and gas apparatus supplies	24	1,863	1,315	- 448	3.52
Flour and Feed	70	817	724	- 93	11.38
Furs, gloves and mittens	11	257	270	+ 13	5.06
Furniture	44	2,933	2,798	- 135	4.60
Iron, malleable	23	4,221	3,834	- 387	9.17
Knit goods	18	2,882	3,038	+ 156	5.41
Lager beer	72	3,381	3,574	+ 193	5.71
Leather	18	4,085	4,069	- 16	.39
Lumber	98	10,415	10,710	+ 295	2.83
Machinery	102	6,656	7,143	+ 487	7.31
Miscellaneous	54	2,038	2,187	+ 149	7.25
Office fixtures	15	797	727	- 70	8.78
Paint	7	124	141	+ 17	5.22
Paper and pulp	30	3,265	3,551	+ 286	8.76
Saddlery	7	215	273	+ 58	26.98
Sash, etc.	66	3,537	3,492	- 45	1.27
Sheet metal goods	21	2,060	1,783	- 277	13.45
Ship building	7	937	879	- 58	6.19
Soap, lye and potash	9	196	180	- 16	8.30
Staves and heading	15	849	359	- 490	2.87
Stone	15	301	320	+ 19	6.31
Straw goods	3	627	572	- 55	8.77
Toys and games	6	608	559	- 49	8.06
Trunks and valises	9	807	821	+ 14	1.73
Veneer	8	449	419	- 30	6.68
Wagons	65	2,740	2,729	- 11	.40
Wooden ware	9	1,487	1,458	- 29	1.95
Woolen and worsted goods	17	1,000	1,014	+ 14	1.40
Average	25	1,736	1,743	+ 7	.36
Average all industries	1,152	79,871	80,159	+ 288	.36

This table includes in detail all industries and show for each not only the average number employed, but these figures for the two years are compared and the increase or decrease, as the case may be, in 1900, as compared with the preceding year is given both in number and per cent.

The table is thus quite comprehensive. It shows what industries gave work to the most persons in 1900 and measures this excess. It also indicates what industries had a smaller number

in 1900 than the preceding and measures the difference. It shows the average for each industry if divided equally among all; and the average for all industries.

Comparing the figures for the two years we find that 22 industries employed more and that 26 industries employed fewer persons in the latter year. While the industries showing an excess in 1900 are less strong numerically, being 22 as against 26, the excess in their case more than offset the decrease shown for the latter. The consequence of this is that for all industries the average for 1900 is the highest. It is interesting to follow the course of the figures in the table. Those who are fully familiar with the conditions in the various industries during the period covered would undoubtedly be able to explain the changes which had taken place in the number employed.

AVERAGE NUMBER OF DAYS IN OPERATION.

By this is meant the average number of days in operation each year by all the establishments which are included in each industry as well as by the total for all industries. Each establishment reported as to the number of days it had been in operation. These figures were used as a basis from which the averages were computed.

The next table in order shows for each of the 46 industries and for all industries the average number of days in operation in 1899 and 1900 respectively together with the increase and decrease in number and per cent, in 1900 as compared with the preceding year. These figures may not mean a great deal when standing alone, but when considered in connection with the other figures in this part and with the situation in general they become more important.

AVERAGE NUMBER OF DAYS IN OPERATION IN 1899—1900.

INDUSTRIES.	No. of establishments.	DAYS IN OPERATION IN		INCREASE + DECREASE — IN 1900.	
		1899.	1900.	Amount.	Per cent.
Agricultural implements	27	282	281	— 1	.25
Artisans' tools	9	302	300	— 2	.66
Beef and pork packing	9	289	282	— 7	2.42
Boots and shoes	28	234	230	— 4	1.41
Boxes, paper	6	298	298	—	.....
Boxes, packing and cigars	29	261	255	— 6	2.30
Brick, tile and sewer pipe	32	150	149	— 1	.67
Brooms, etc.	18	268	249	— 19	7.09
Burial cases	3	300	298	— 2	.67
Canning vegetables	16	139	129	— 10	7.19
Cement, lime and plaster	12	258	251	— 7	2.71
Cigars	48	292	286	— 6	2.06
Chairs	12	281	278	— 3	1.07
Clothing	29	296	290	— 6	2.03
Cooking and heating apparatus ..	5	292	286	— 6	2.06
Confectionery	13	295	295	—	.....
Cooperage	17	266	265	—	.....
Cotton and linen goods	6	300	291	— 9	3.00
Electric and gas apparatus supplies	24	299	297	— 2	.67
Flour and feed	70	282	272	— 10	3.55
Furs, gloves and mittens	11	299	293	— 6	2.01
Furniture	44	290	286	— 4	1.38
Iron, malleable	23	297	289	— 8	2.69
Knit goods	18	292	289	— 3	1.03
Lager beer	72	301	315	+ 14	4.65
Leather	18	307	306	— 1	.33
Lumber	98	230	225	— 5	2.17
Machinery	102	297	299	+ 2	.71
Miscellaneous	54	297	294	— 3	1.01
Office fixtures	15	296	295	— 1	.33
Paint	7	275	273	— 2	.73
Paper and pulp	30	295	295	—	.....
Saddlery	7	296	302	+ 6	2.03
Shash, etc.	66	77	274	+ 3	1.09
Sheet metal goods	21	301	301	—	.....
Ship building	7	279	292	+ 13	4.66
Soap, lye and potash	9	303	298	— 5	1.65
Staves and heading	15	244	246	+ 2	.82
Stone	15	266	262	— 4	1.50
Straw goods	3	293	276	— 17	5.80
Toys and games	6	262	281	+ 19	7.25
Trunks and valises	9	296	290	— 6	2.03
Veneer	8	282	282	—	.....
Wagons	56	300	296	— 4	1.33
Wooden ware	9	274	278	+ 4	.73
Woolen and worsted goods	17	284	278	— 6	2.11
Average	1,152	280	278	— 2	.72

The preceding table relates to the time in operation. In considering the figures for all industries it is found that the average number of days in operation was 280 in 1899 and 278 in 1900. There was thus a decrease for the latter year of 2 days or .72 per cent. These figures represent the nearest whole number. There were fractions in each case but these have been eliminated.

The facts thus mentioned represents all industries. Going back through the tables it will be seen that the same facts, as ap-

plicable to each industry, are also given. To consider each industry separately, however, is hardly necessarily and mostly for the reason that the table itself is so plain as to convey the full meaning of the facts presented.

On the whole the differences as between the two years are not great. In two industries it reaches 19 days but these are the extremes. In most cases the variations amount to a few days only.

One week would probably be a fair average. In comparing the figures not only as between the industries but as between the two years many interesting facts may be developed.

Of the 46 industries included 33 show a decrease for 1900, 7 show an increase and 6 no change. These facts, especially in addition to the decrease of 2 days for all industries when taken together plainly indicate a tendency toward a shorter operating time for the latter year.

The reasons for this tendency are not easily discovered. In fact it is out of harmony with the remaining facts in this part. The situation in 1900, as a whole, seems to show an improvement upon that of 1899. More persons were employed, the earnings were higher, the investment was greater and the increase in the value of the products was rather marked. Manufacturers who were asked regarding the decrease in the time in operation stated that it was due to the necessity of closing down for repairs. This answer probably explains the situation. From the reports as a whole it is plain that few had to remain idle because of lack of business. In fact many were unable to fill all their orders, while practically none were without them.

AVERAGE YEARLY EARNINGS.

The figures under this head shows the average yearly earnings to each person when the average number were employed.

This amount was obtained by adding together the amount paid as wages by the different establishments and dividing this amount by the average number of persons employed by the establishments thus included.

The next table in order thus shows for each industry separately and for all industries, the average yearly earnings in

1899 and 1900. It also shows the increase and decrease both in amount and per cent. in 1900 when compared with the year which preceded. The figures presented in this table are significant. They should be closely studied not only when standing alone but in connection with the weekly earnings, the number employed and the product. In fact they have some bearing upon all the other presentations in this part.

AVERAGE YEARLY EARNINGS IN 1899-1900.

INDUSTRIES.	No. of establishments.	AVERAGE YEARLY EARNINGS IN		INCREASE + DECREASE - IN 1900.	
		1899.	1900.	Amount.	Per cent.
Agricultural implements	27	\$475 00	\$547 26	+\$27 74	15.21
Artisans' tools	9	375 10	447 87	72.77	19.40
Beef and pork packing	9	407 00	423 64	22.64	5.56
Boots and shoes	28	302 64	355 28	52 64	17.39
Boxes, paper	6	254 10	255 20	1 10	.43
Boxes, packing and cigars	29	230 94	300 17	19 23	6.84
Brick, tile and sewer pipe	32	311 78	380 55	68.77	22.06
Brooms, etc.	18	301 52	299 84	1 68	.59
Burial cases	3	550 78	348 48	7 80	2.08
Canning vegetables	16	232 88	247 02	14 14	6.07
Cement, lime and plaster	12	384 74	391 33	26 56	7.28
Cigars	48	367 32	369 07	1 75	.48
Chairs	12	310 60	324 29	13 69	4.41
Clothing	29	341 60	327 40	14 20	4.16
Cooking and heating apparatus	5	468 58	470 62	2 04	.44
Confectionery	13	232 83	243 48	10 65	4.57
Cooperage	17	385 00	412 60	27 60	7.17
Cotton and linen goods	6	245 89	268 55	22 66	9.22
Electric and gas apparatus supplies	24	482 24	462 66	19 58	4.06
Flour and feed	70	635 66	626 50	9 16	5.35
Furs, gloves and mittens	11	312 68	339 84	27 16	8.69
Furniture	44	322 42	343 23	20 81	6.45
Iron, malleable	23	490 09	481 83	8 26	1.68
Knit goods	18	215 13	241 75	26 62	12.87
Lager beer	72	461 08	514 33	53 25	11.55
Leather	18	390 00	406 27	16 27	4.18
Lumber	98	429 77	461 08	31 31	7.29
Machinery	102	543 94	545 45	1 51	.29
Miscellaneous	54	424 14	424 84	70	.16
Office fixtures	15	298 93	423 38	24 45	6.13
Paint	7	362 01	376 76	13 75	3.80
Paper and pulp	30	401 69	399 27	2 42	.60
Saddlery	7	337 84	366 06	21 78	5.95
Sash, etc.	66	358 83	366 97	7 14	1.99
Sheet metal goods	21	280 78	317 96	36 58	13.03
Ship building	7	454 05	451 99	2 66	.59
Soap, lye and potash	9	378 90	349 99	28 91	7.63
Staves and heading	15	311 73	333 88	22 15	7.11
Stone	15	533 67	576 84	37 77	7.01
Straw goods	3	285 69	299 10	13 41	4.69
Toys and games	6	255 75	287 45	31 70	12.39
Trunks and valises	9	304 07	321 28	17 21	5.66
Veneer	8	211 31	350 15	38 84	12.48
Wagons	55	450 66	440 61	10 05	2.23
Wooden ware	9	320 90	323 29	7 99	2.30
Woolen and worsted goods	17	303 54	309 80	6 26	2.06
Average	1,152	\$94 58	411 48	16 90	4 28

The above table is made upon the same basis as the other tables in this part. It gives each industry included. Then for each of these industries it gives the number of establishments, the average yearly earnings to each person employed, the increase or decrease in 1900 and the per cent. of same.

Taking up first the figures for all industries as found at the foot of the table it is seen that the average earnings to each worker was \$394.58 and \$411.48 respectively for the two years. This indicates an increase for the latter year of \$16.90, or 4.28 per cent.

This was the average for all industries. For individual industries the earnings stand at some point either above or below these figures. In industries such as confectioneries, knit goods, toys, etc., the earnings are extremely low. In others again such as flour and feed, machinery of all kinds, etc., the earnings are much higher.

While on the whole there was an increase in earnings this increase was not shared by all of the 46 industries. This is evident even from a glance at the table. The majority, however, show an increase for 1900. Classified upon this basis it is found that 34 industries show a higher average earning in 1900 than for the preceding year and that 12 show a lower.

In considering the percentages of the changes which took place the same tendencies are found as in the amount. In one case the increase amounts to over 22 per cent., in another to over 19 per cent. and in a third to seventeen. These are the greatest changes. Eight industries show an increase of ten per cent. and over; fifteen show an increase of from five to ten per cent., and for eleven the increase is less than five per cent.; while the remaining twelve show a smaller decrease in earnings.

PRIVATE FIRMS AND CORPORATIONS, PARTNERS AND STOCK- HOLDERS.

Each establishment was requested to report as to whether it was a private firm or corporation. All the private firms, and all but 26 corporations complied with this request. Those who failed to comply attributed this failure to their inability to ascer-

tain the number of their stockholders. As most of the latter were corporations whose shares are traded from day to day it is likely that their position in this respect was justifiable.

The facts thus obtained have been compiled and are presented in the following table. As will be noticed this table is quite large covering two pages. It gives in detail each of the industries included. Then for each of these industries it shows for 1899 and 1900 the number of private firms together with the respective number of male, female, and total number of partners and stockholders, and the number of corporations together with the respective number of male, female, and total number of stockholders. It also gives the total number of identical establishments included each year. As thus completed the table shows the figures for each year, and, as the classifications are the same it admits of many interesting comparisons. For instance, by giving the private firms and corporations each year it throws much light upon the tendency in the mode of management, and by giving the partners and stockholders it reveals much that relates to whether there is a tendency towards concentration in the ownership of industrial enterprises. The facts shown are not conclusive on either point, but are certainly significant.

PRIVATE FIRMS AND CORPORATIONS, PARTNERS AND STOCKHOLDERS
IN 1899.

INDUSTRIES.	Number of private firms.	NUMBER OF PARTNERS.			Number of corporations.	NUMBER OF STOCKHOLDERS.			Total number of partners and stockholders.
		Male.	Female.	Total.		Male.	Female.	Total.	
Agricultural implements	4	6	.....	6	23	185	47	232	238
Artisans' tools	7	14	.....	14	1	5	.....	5	19
Beef and pork packing	4	20	1	21	5	33	.....	33	54
Boots and shoes	8	12	.....	12	19	147	18	165	177
Boxes, paper	5	8	1	9	1	5	2	7	16
Boxes, packing and cigars ..	16	29	.....	29	13	55	.....	55	84
Brick, tile and sewer pipe ..	23	33	1	39	8	45	13	53	97
Brooms, etc.	14	29	.....	29	4	26	3	29	58
Burial cases	1	2	.....	2	2	13	6	19	21
Canning vegetables	5	9	.....	9	11	345	14	359	358
Cement, lime and plaster ..	3	4	.....	4	9	319	75	394	398
Cigars	46	65	2	67	2	11	.....	11	73
Chairs	2	3	.....	3	10	147	18	165	168
Clothing	10	24	1	25	19	139	61	200	225
Cooking & heating apparatus	3	7	.....	7	2	8	.....	8	15
Confectionery	2	2	.....	2	7	31	6	37	39
Cooperage	13	14	.....	14	4	35	1	36	50
Cotton and linen goods.....	3	22	2	24	3	124	50	174	198
Electric & gas apparatus sup- plies	9	16	.....	16	15	120	25	145	161
Flour and feed	45	71	5	76	23	157	30	187	263
Furs, gloves and mittens....	9	17	.....	17	2	8	.....	8	25
Furniture	16	36	.....	36	28	373	36	409	445
Iron, malleable	5	9	.....	9	17	436	21	457	466
Knit goods	4	11	1	12	13	85	21	106	118
Lager beer	37	60	15	75	34	383	66	449	524
Leather	5	11	.....	11	12	3,099	1,023	4,122	4,133
Lumber	42	66	7	73	56	290	49	339	412
Machinery	52	99	3	102	46	264	43	307	409
Miscellaneous	24	48	4	52	28	1,347	17	1,364	1,416
Office fixtures	6	13	.....	13	9	123	.....	123	136
Paint	4	6	.....	6	3	9	1	10	16
Paper and pulp	4	11	.....	11	25	320	41	361	372
Saddlery	2	6	1	7	5	19	4	23	30
Sash, etc.	42	85	3	88	24	143	3	146	224
Sheet metal goods	16	29	.....	29	5	17	2	19	48
Ship building	3	5	.....	5	2	11	1	12	17
Soap, lye and potash	6	9	1	10	3	42	4	46	56
Staves and heading	7	14	.....	14	3	31	1	32	46
Stone	10	17	2	19	3	22	.....	22	41
Straw goods	1	1	.....	1	2	11	2	13	14
Toys and games	3	6	2	8	2	6	1	7	15
Trunks and valises	1	3	.....	3	8	56	16	72	75
Veneer	3	4	.....	4	5	31	2	33	37
Wagons	39	59	3	62	16	303	55	358	420
Wooden ware	2	2	.....	2	7	31	4	35	37
Woolen and worsted goods ..	5	7	.....	7	11	78	27	105	112
Total	571	1,029	55	1,084	555	9,488	1,809	11,297	12,381

PRIVATE FIRMS AND CORPORATIONS, PARTNERS AND STOCKHOLDERS
IN 1900.

INDUSTRIES.	Number of private firms.	NUMBER OF PARTNERS.			Number of corporations.	NUMBER OF STOCKHOLDERS.			Total number of partners and stockholders.	Number of establishments in 1899, 1900.
		Male.	Female.	Total.		Male.	Female.	Total.		
Agricultural implements	4	6	.....	6	28	178	47	223	229	27
Artisans' tools	7	12	.....	12	1	5	.....	5	17	9
Beef and pork packing.....	8	10	1	11	6	44	3	47	53	9
Boots and shoes	7	14	.....	14	20	140	20	160	174	28
Boxes, paper	5	8	1	9	1	6	2	7	16	6
Boxes, packing and cigars	16	29	.....	29	13	55	.....	55	84	29
Brick, tile and sewer pipe	23	30	2	32	9	52	12	64	96	33
Brooms, etc.	14	23	.....	23	4	24	5	29	52	18
Burial cases	1	2	.....	2	2	18	7	20	28	3
Canning vegetables	5	9	.....	9	11	255	13	268	277	16
Cement, lime and plaster.....	3	4	1	5	9	320	73	393	398	12
Cigars	47	61	2	63	1	6	.....	6	69	48
Chairs	3	3	1	4	9	126	10	136	140	12
Clothing	9	23	.....	23	30	187	67	254	226	28
Cooking & heating apparatus	3	7	.....	7	2	8	1	9	16	5
Confectionery	2	2	.....	2	7	31	6	37	39	18
Cooperage	13	14	.....	14	4	34	1	35	49	17
Cotton and linen goods.....	3	23	3	26	3	118	54	167	193	6
Electric & gas apparatus supplies	9	15	.....	15	15	133	12	145	160	24
Flour and feed	44	70	6	76	24	136	27	163	239	70
Furs, gloves and mittens.....	9	17	.....	17	2	8	.....	8	25	11
Furniture	15	30	2	32	29	381	37	418	450	44
Iron, malleable	5	8	.....	8	17	160	14	174	182	23
Knit goods	3	4	.....	4	14	77	41	118	122	18
Lager beer	37	50	3	53	34	414	82	496	549	72
Leather	5	10	1	11	12	5,510	1,530	7,040	7,051	12
Lumber	40	56	6	62	58	1,495	55	1,550	1,612	96
Machinery	49	85	5	90	49	266	43	308	398	102
Miscellaneous	22	36	1	37	30	1,559	23	1,582	1,619	54
Office fixtures	6	13	.....	13	9	165	23	187	200	15
Paint	4	6	.....	6	3	9	1	10	16	7
Paper and pulp	4	11	.....	11	35	284	48	332	343	30
Saddlery	2	6	.....	6	5	21	3	24	30	7
Sash, etc.	40	77	1	78	26	146	18	163	237	66
Sheet metal goods	16	28	.....	28	5	17	3	20	48	21
Ship building	3	5	.....	5	2	11	1	12	17	7
Soap, lye and potash	6	9	1	10	3	42	4	46	56	9
Staves and heading	8	18	.....	18	7	28	1	29	47	15
Stone	10	23	2	24	3	23	.....	23	46	15
Straw goods	1	1	.....	1	2	12	2	14	15	3
Toys and games	3	5	.....	5	2	7	1	8	10	6
Trunks and valises	1	3	.....	3	8	52	18	70	73	9
Veneer	3	4	.....	4	5	29	8	37	38	8
Wagons	38	56	4	60	17	243	106	349	409	55
Wooden ware	3	2	.....	2	7	31	4	35	37	9
Woolen and worsted goods	5	8	.....	8	11	80	24	104	112	17
Total	557	934	43	977	569	12,882	2,440	15,322	16,299	1,152

Considering the totals in the preceding table it is found that in 1899 of the 1,152 establishments included 571 were private firms with 1,029 male, 55 female, or a total of 1,084 partners; and there were 555 corporations with 9,488 male, 1,809 female, or a total of 11,297 stockholders. The partners or stockholders combined thus numbered 12,881 persons.

In 1900 there were 557 private firms with 934 male, 43 female, or a total of 977 partners; and 569 corporations with 12,882 male, 2,440 female, or a total of 15,322 stockholders. The total number of both partners and stockholders this year was thus 16,299 persons.

This represents the totals. In comparing the figures for the two years, the increase or decrease for the latter year may be seen.

During the period covered there was a decrease in the number of private firms and an increase in the number of corporations. This is seen from the fact that of the 1,152 establishments included, 571, or 49.56 per cent. were private firms in 1899, while only 557, or 48.35 per cent. were private firms in 1900. There had thus been a decrease of 1.21 per cent. in the number of private firms and an increase of the same amount in the number of corporations. This change is not great. But if it should be found that it has been going on for some time it would be only natural to conclude that there is a tendency towards the corporate form of management in manufacturing enterprises.

The decrease in the private firms was also felt by a decrease in the number of partners. Thus it is seen that the total number of partners were reduced from 1,084 to 977, a decline of 107 or practically 10 per cent.

The male partners declined from 1,029 to 934, or 9.23 per cent.; and the female partners declined from 55 to 43 or nearly 22 per cent. Since there was a decline in the number of private firms it is only natural there should also be a decline in the number of partners.

In the case of corporations directly the opposite phenomena may be noticed. While the private firms together with those interested in them declined in number, the corporations and the stockholders increased. As seen above there were 14 more corporations in 1900 than in the preceding year. While this change is not very marked it is perhaps big enough to show the tendency in this respect.

The total number of stockholders changed from 11,297 to 15,322, an increase of 2,951, or 23.84 per cent. The male stockholders increased from 9,488 to 12,882, or 35.77 per cent., and the female increased from 1,809 to 2,440, or nearly 30 per cent.

The increase in the number of the stockholders was thus much greater than the increase in the number of corporations. In 1899 there were about 22 stockholders to each corporation; while in 1900 there were about 27 to each.

The total number of both partners and stockholders was 12,381 in 1899, and 16,299 in 1900. There was thus an increase for the latter year of 3,918, or 31.64 per cent. The average number of partners and stockholders, when combined, to each one of the 1,152 establishments was about 11 in the former and 14 in the latter year.

CAPITAL INVESTED.

Each establishment included in its report a statement of the capital it had employed in obtaining the products for the years 1899 and 1900. From these figures were then computed first, the total amount of capital used by the establishments in each of the 46 industries, and second the amount for all the establishments and industries included.

To define capital, or in other words to explain what this word stands for when made to embrace everything that by a stretch of the terms might be included under it in a manufacturing enterprise is no easy matter and will not be attempted.

The only purpose here is to point out the amount invested in such tangible objects, or means of production as may be classified under land, buildings, fixtures, machinery and tools of all kinds, material, cash, etc. Capital of this nature is well understood and comparatively easily ascertained. Practically every manufacturer can readily tell the amount invested under these heads.

In the following table is found the amount of the investment as capital for each year not only in the establishments in each industry but for all industries.

CAPITAL INVESTED OR USED IN 1899 AND 1900 BY THE ESTABLISHMENTS INCLUDED.

INDUSTRIES.	Number of establishments.	AMOUNT OF CAPITAL INVESTED IN		INCREASE + DECREASE - IN 1900.	
		1899.	1900.	Amount.	Pr ct.
Agricultural implements..	27	\$12,471,417 51	\$13,726,206 07	+	\$1,254,788 56 10.06
Artisans' tools	9	886,957 56	917,897 68	+	30,940 12 3.49
Beef and pork packing....	9	3,947,832 00	4,069,690 67	+	121,858 67 3.08
Boots and shoes	28	2,327,632 43	2,353,820 38	+	26,187 95 1.12
Boxes, paper	6	470,376 66	478,998 81	+	8,622 15 1.83
Boxes, packing and cigars	29	1,343,233 30	1,368,715 20	+	25,481 90 1.90
Brick, tile and sewer pipe	32	573,895 83	509,887 54	-	64,008 29 11.15
Brooms, etc.	18	151,719 21	163,195 86	+	11,476 65 7.56
Burial cases	3	597,150 00	582,200 00	-	14,950 00 2.50
Canning vegetables	16	632,989 73	666,478 01	+	33,488 28 5.29
Cement, lime and plaster	12	1,030,190 10	1,110,691 20	+	80,501 10 7.81
Cigars	48	636,694 57	608,601 72	-	28,092 85 4.41
Chairs	12	3,264,848 88	3,362,286 48	+	97,437 60 2.98
Clothing	29	2,415,091 51	2,463,035 47	+	49,743 96 1.99
Cooking and heating apparatus	5	980,043 71	980,874 58	+	830 87 .08
Confectionery	13	1,062,181 68	1,193,520 83	+	141,339 15 13.43
Cooperage	17	420,640 30	442,008 25	+	21,368 05 5.08
Cotton and linen goods ..	6	767,047 44	757,900 52	-	863 08 .11
Electric & gas apparatus supplies	24	2,002,954 09	2,620,464 10	+	17,510 01 .67
Flour and feed	70	6,441,675 83	5,706,074 49	-	736,601 34 11.43
Furs, gloves and mittens..	11	274,647 73	285,333 86	+	10,686 13 3.89
Furniture	44	3,061,319 44	3,068,970 16	+	7,650 72 .25
Iron, malleable	23	4,509,698 15	4,825,275 93	+	315,577 78 6.98
Knit goods	18	2,234,022 61	2,287,989 46	+	53,966 85 2.41
Lager beer	72	35,097,827 40	39,119,966 60	+	4,022,129 10 11.46
Leather	18	11,236,466 73	11,012,268 86	-	224,198 87 2.00
Lumber	98	21,453,188 10	21,412,173 30	-	40,964 80 .19
Machinery	102	12,043,735 00	13,073,725 96	+	1,029,990 96 8.55
Miscellaneous	54	6,769,142 02	6,784,800 19	+	15,658 17 .23
Office fixtures	5	816,711 29	765,213 78	-	51,497 51 6.31
Paint	7	740,237 52	747,413 18	+	7,175 66 .97
Paper and pulp	30	10,295,994 07	10,905,416 60	+	609,422 53 5.82
Saddlery	7	182,665 44	191,394 66	+	8,729 22 4.78
Sash, etc.	66	4,828,360 94	4,945,150 69	+	116,789 65 2.42
Sheet metal goods	21	2,463,317 89	2,517,191 65	+	53,873 76 2.19
Ship building	7	1,149,325 19	1,158,444 32	+	9,119 13 .79
Soap, lye and potash	9	534,693 75	465,459 33	-	69,234 42 12.94
Staves and heading	15	266,666 44	272,302 65	+	5,646 21 2.12
Stone	15	523,577 14	569,022 71	+	45,445 57 8.68
Straw goods	3	466,489 22	450,207 41	-	16,281 81 3.49
Toys and games	6	569,101 17	573,561 78	+	4,460 61 .78
Trunks and valises	9	1,087,341 27	1,092,864 57	+	5,523 30 .51
Veneer	8	247,804 87	290,349 82	+	42,544 95 17.17
Wagons	55	5,850,957 63	5,901,092 86	+	50,135 24 .86
Wooden ware	9	847,073 13	870,368 91	+	23,295 78 2.76
Woolen and worsted goods	17	1,625,058 62	1,747,938 93	+	122,880 31 7.50
Total	1,152	\$172,179,926 09	\$179,415,435 38	+	\$7,235,709 29 4.20

This table is concerned with the capital invested or used in 1899 and 1900. It describes in figures the amount for each industry as well as whether there was an increase or decrease for the latter year. It also gives these results for all industries when combined. The importance of these figures as of most of the presentations in this part is found in the changes which they point out from year to year.

The figures which relate to all industries, or the last in the table, are the most important. They indicate the situation during the period by showing whether capital had increased or been withdrawn. Considering all industries there had been an addition of new capital. This is plain from the fact that the amount for 1899 was \$172,179,926.09, as against 179,415,435.38, in 1900. This is an increase for the latter year of \$7,235,709.29, or of 4.20 per cent.

All the industries included, however, did not share in this increase. A glance at the table will show this. Even if times have been good it was not to be expected that, in a state with as many industries as Wisconsin, there should have been an increase in all. The real situation in this respect is perhaps best illustrated by the facts in the table which show that out of the 46 industries included, 37 show an increase in the capital used in the latter year, while only 9 show a decrease.

The changes which thus took place in the amount for the two years were not very great. This is shown not only from the actual amount for each but from the proportion of the change. The greatest increase, relatively, is in trunks and valises and the greatest decrease is in soap, lye, etc. In the former case it amounted to 17.17 per cent., in the latter to 12.94 per cent. These are the two extremes, however. The average change either way amounts to only a few per cent.

The figures obtained as to capital were classified under land, buildings and fixtures, machinery, implements and tools, raw material on hand, date of reporting, and cash and other capital. The proportion under each of these heads when "all industries are included is as follows:

Classification of Capital.	1899. Per cent.	1900. Per cent.
Land	9.39	9.88
Buildings and fixtures	20.66	21.23
Machinery, implements and tools	22.45	22.90
Raw material, date of reporting.....	20.70	20.59
Cash and other items	26.80	25.40
Total	100.00	100.00

The amount invested when classified for each year thus stands as follows: Land 9.39 and 9.88 per cent. respectively for 1899

and 1900; buildings and fixtures 20.66 and 21.23 per cent. respectively; machinery, implements and tools, 22.45 and 22.90 per cent.; raw material, 20.70 and 20.59 per cent.; and cash and other capital 26.80 and 25.40 per cent. respectively.

In looking over these figures one thing in particular will attract attention and that is the small variations as between the two years in the amount of capital in each class. Of the five classes into which capital was divided only four show a difference of more than a small fraction of one per cent., while for the fifth, that of cash, etc., capital, the difference is only 1.4 per cent. These facts are important from several points of view. Among other things they go far in showing that the relations between the various kinds of capital employed is much less affected by changes than might appear to be the case.

It is held by many that it is impossible to ascertain definitely all the capital invested in a manufacturing plant. Considering everything, however, this can hardly be regarded as a true description of the situation. It is undoubtedly a fact that a statement of everything that under one pretext or another may be regarded as capital is not easily obtained. On the other hand the greater part of it, that part which varies with the conditions, and which properly comes under one or the other of the above heads is within reach. This is a fact that is not easily refuted. Since the bulk of the capital can be gotten at, and, since the part that can thus be had, is the very one that is affected by industrial conditions it must also follow that the facts presented meets the purpose for which they were collected.

VALUE OF GOODS MADE OR WORK DONE.

By this is meant the selling value of the goods made or work done during each of the two years included.

This value was obtained in the following way. Each establishment reported the market value of its products or of the work done for the year. These figures were then computed so as to give the total value first for each industry and then for all industries. As such reports are received annually the figures for the two years were easily obtained.

The main purpose of these presentations is to show the condition from time to time. If there is an increase from one year to another this of itself is evidence of the fact that our industries are growing. This is only a reasonable conclusion. Likewise it would be only fair to assume that a decrease as time goes on would undoubtedly mean that for some reason there is a backward movement. Such phenomena as these are of the greatest importance in the business world and should be accurately measured.

In the presentations actual facts only are given. No effort has been made to produce anything that cannot be described by figures. This, while the value of the output is shown no reasons are given why this value varied as between the two years. The forces which so operate as to cause a greater product to be turned out one year than in another are not often of such a nature that they can be measured by mere figures only.

The following table is interesting. It deals not only with the output each year but also with the changes that took place. A close study of this table will fully repay the trouble.

**SELLING VALUE OF THE GOODS MANUFACTURED OR WORK DONE
IN 1899 AND 1900.**

INDUSTRIES.	Number of establish- ments.	AMOUNT OF GOODS MANUF. AND WORK DONE IN		INCREASE + DE- CREASE - IN 1900.	
		1899.	1900.	Amount.	Pr ct.
Agricultural implements ..	27	\$7,432,127 69	\$7,918,399 15	+	\$486,271 46 6.54
Artisans' tools	9	1,285,868 86	1,129,261 38	-	156,607 48 10.80
Beef and pork packing	9	13,929,994 58	15,357,168 93	+	1,407,174 35 10.10
Boots and shoes	28	3,796,942 20	4,319,748 48	+	522,806 28 13.77
Boxes, paper	6	682,929 44	696,932 24	+	14,002 80 2.05
Boxes, packing and cigars ..	29	2,074,337 19	2,134,307 88	+	59,970 78 2.89
Brick, tile and sewer pipe ..	32	458,230 23	492,490 50	+	34,260 27 7.48
Brooms, etc.	18	285,934 70	245,768 25	-	9,823 66 4.16
Burial cases	3	486,250 00	534,273 58	+	48,022 58 9.88
Canning vegetables	16	1,178,672 44	1,184,210 94	+	10,538 50 .90
Cement, lime and plaster ..	12	1,198,834 21	1,317,276 41	+	118,442 20 9.88
Cigars	48	1,070,025 06	1,115,297 32	+	45,272 27 4.23
Chairs	12	2,370,132 59	3,559,994 80	+	1,489,862 21 62.86
Clothing	29	5,609,780 36	5,416,804 79	-	192,976 57 3.44
Cooking and heating appa- ratus	5	1,641,896 86	1,680,715 39	+	38,818 53 2.30
Confectionery	13	2,012,268 29	2,215,763 30	+	203,495 01 10.11
Cooperage	17	680,870 12	682,388 43	+	1,518 31 .22
Cotton and linen goods	6	667,928 24	682,496 71	+	14,567 48 2.18
Electric and gas apparatus supplies	24	3,407,276 26	3,161,692 04	-	245,584 31 7.21
Flour and feed	70	15,470,799 85	12,820,019 78	-	2,650,780 07 17.13
Guns, gloves and mittens ..	11	492,126 84	607,221 37	+	115,095 53 3.07
Furniture	44	3,743,969 86	3,804,121 76	+	60,151 90 1.61
Iron, malleable	23	11,377,207 82	10,350,189 08	-	1,027,018 74 9.03
Knit goods	18	2,663,028 78	3,111,307 09	+	448,278 31 17.27
Lager beer	72	19,728,386 48	22,186,940 04	+	2,458,553 56 12.36
Leather	18	13,067,737 42	14,937,946 52	+	1,870,209 10 14.40
Lumber	98	23,119,094 33	31,664,761 29	+	8,545,666 96 36.91
Machinery	102	12,836,120 76	14,666,607 80	+	1,830,487 04 14.19
Miscellaneous	54	4,450,050 00	4,796,250 00	+	346,200 00 7.76
Office fixtures	15	1,064,284 87	1,016,227 47	-	48,057 40 4.51
Paint	7	1,225,002 77	1,306,492 79	+	81,489 98 6.65
Paer and pulp	30	8,783,114 60	9,066,774 95	+	283,660 35 3.23
Saddlery	7	459,567 01	524,838 59	+	75,263 58 16.38
Sash, etc.	66	6,326,134 75	6,364,638 60	+	38,503 85 .61
Sheet metal goods	21	3,619,991 98	2,897,199 66	-	722,792 32 19.97
Ship building	7	992,151 11	1,227,266 40	+	235,115 29 23.09
Soap, lye and potash	9	856,347 85	846,750 52	-	9,597 33 1.12
Staves and heading	15	377,988 11	398,060 64	+	20,072 53 5.31
Stone	15	527,131 25	600,981 25	+	73,850 00 14.01
Straw goods	3	708,762 18	724,672 36	+	15,910 18 2.26
Toys and games	6	524,972 60	542,824 57	+	17,851 97 3.40
Trunks and valises	9	1,289,185 47	1,385,906 38	+	96,719 91 7.50
Veneer	8	552,871 06	586,360 98	+	33,489 92 6.05
Wagons	55	5,419,507 66	5,713,099 57	+	293,591 91 5.39
Woodenware	9	1,872,025 58	1,799,378 04	-	72,647 54 3.93
Woolen and worsted goods ..	17	1,832,940 92	1,992,919 56	+	159,978 63 8.73
Totals	1,152	\$193,555,784 97	\$209,942,633 59	+	\$16,386,848 62 8.46

For each industry included and for all industries, when combined, the above table shows the actual or market value of the goods produced first for 1899 and then for 1900. It also points out in each case the changes which took place in the output as between the two years.

Turning to the totals at the foot of the table we find that the value of the product was \$193,555,784.97 and \$209,942,633.59

in 1899 and 1900 respectively. This is an increase for the latter year of \$16,386,848.62, or 8.46 per cent.

These figures are very satisfactory. They show a healthy condition of our manufacturing industries. When considered in connection with figures of the same kind for preceding years they also go a long ways in showing that Wisconsin is rapidly forging to the front as a manufacturing state.

As in the case of capital invested and other presentations there are of course changes both ways. Of the industries included 37 give an increase in the value of the product, while 9 give a decrease. In some cases the changes are also quite large, almost surprisingly so. This, however, is nothing new. Manufacturing is subject to so many influences that the returns can hardly be expected to be uniform either in one direction or the other.

TOTAL AMOUNT PAID AS WAGES.

Each establishment reported the total amount paid as wages to mechanics, operatives and laborers. From these reports the total amount for each industry as well as for all industries in 1899 and 1900 have been compiled.

To these computations the following table has been devoted. This table therefore shows by industries and for all when combined, the total amount paid as wages each year together with computations giving the increase or decrease in 1900 as compared with the preceding year.

TOTAL AMOUNT PAID AS WAGES IN 1899 AND 1900.

INDUSTRIES.	Number of establishments.	AMOUNT PAID AS WAGES IN		INCREASE + DECREASE - IN 1900.	
		1899.	1900.	Amount.	Pr ct.
Agricultural implements ..	27	\$1,436,922 72	\$1,404,829 54	\$32,093 18	2.23
Artisan tools	9	363,474 43	317,989 87	45,484 56	12.51
Beef and pork packing....	9	570,779 80	601,980 59	31,150 79	5.46
Boots and shoes	28	732,694 62	857,644 76	24,960 14	17.05
Boxes, paper	6	103,670 78	101,827 33	1,843 45	1.81
Boxes, packing and cigars.	29	354,826 32	374,614 99	19,788 67	5.58
Brick, tile and sewer pipe.	32	137,496 07	172,769 13	35,273 06	25.66
Brooms, etc.	18	53,017 55	63,966 50	848 95	1.35
Burial cases	3	123,824 00	122,200 10	887 90	.61
Canning, vegetable	16	108,232 15	109,678 97	1,386 82	1.19
Cement, lime and plaster..	12	161,594 60	169,536 73	8,242 13	5.10
Cigars	48	270,348 21	291,198 97	20,850 76	7.71
Chairs	12	986,902 09	1,144,425 30	157,623 21	15.93
Clothing	29	966,393 94	997,536 58	31,142 64	3.22
Cooking and heating apparatus ..	5	489,668 73	497,444 94	7,776 21	1.58
Confectionery	13	260,528 09	317,791 04	67,262 25	25.08
Cooperage	1	159,778 00	162,967 67	3,189 67	1.37
Cotton and linen goods....	6	115,323 48	118,969 05	3,645 57	3.16
Electric and gas apparatus supplies ..	24	657,299 58	608,394 46	48,905 12	7.44
Flour and feed	70	519,531 52	435,588 84	83,942 68	16.15
Furs, gloves and mittens..	11	80,369 81	91,757 91	11,398 10	14.18
Furniture	44	945,653 63	960,365 81	14,712 18	1.56
Iron, malleable	23	2,068,676 81	1,847,334 09	221,342 72	10.70
Knit goods	18	620,017 50	734,430 64	114,413 14	18.45
Lager beer	72	1,568,914 02	1,828,224 66	279,310 64	17.98
Leather	18	1,593,137 67	1,653,112 51	59,974 84	3.76
Lumber	98	4,475,979 72	4,938,133 52	462,153 80	10.33
Machinery	102	3,620,466 71	3,896,124 21	275,657 50	7.61
Miscellaneous	54	864,816 39	929,116 03	64,299 64	7.44
Office fixtures	15	317,951 13	307,797 92	10,153 21	3.19
Paint	7	48,509 15	52,982 15	4,473 00	9.22
Paper and pulp	30	1,311,536 19	1,417,818 28	106,282 09	8.10
Saddlery	7	83,385 13	99,935 38	16,550 25	19.85
Sash, etc.	66	1,269,173 91	1,277,988 16	8,814 25	.69
Sheet metal goods.....	21	578,404 05	565,848 52	12,555 53	2.17
Ship building	7	425,447 34	396,771 63	28,675 71	6.74
Soap, lye and potash	9	64,265 16	62,998 33	1,266 83	1.97
Staves and heading	15	108,772 31	119,862 22	11,089 91	10.20
Stone	15	162,111 14	183,427 80	21,316 66	13.15
Straw goods	3	179,127 42	171,085 45	8,041 96	4.49
Toys and games	6	155,497 44	160,686 45	5,189 01	3.34
Trunks and valises	9	245,383 15	263,770 64	18,387 49	7.49
Veneer	8	139,776 65	146,715 81	6,939 16	4.96
Wagons	55	1,234,809 42	1,202,427 71	32,381 71	26.22
Woodenware	9	487,170 86	478,644 48	8,526 38	1.75
Woolen and worsted goods	17	303,539 29	314,137 11	10,597 82	3.49
Totals	1,152	\$31,515,149 38	\$32,983,768 79	\$1,468,574 41	4.66

In this table we find the amount paid as wages not only in 1899 but in 1900. The two amounts are also compared and the differences pointed out.

For the 1,152 establishments included, or for all industries, the amount thus paid as wages was \$31,515,149.38, and \$32,983,768.79, respectively, for the two years. The amount paid in the latter year is therefore greater than that for the former, the difference being \$1,468,574.41, or an increase of 4.66 per cent.

This increase for the latter year is in full harmony with the increase which as already shown, was found for capital invested and value of the product. It indicates that wages kept an even pace in the general progress.

Of the 46 industries included 32 give an increase and 14 a decrease in the amount paid as wages. The increase for all industries is thus due to the fact that the increase in the 32 industries was greater than the opposite change in the 14 other industries.

In a general way it can be said that the various elements which together make up production are affected by the same tendencies. Thus when the volume of production is increased it is expected that the other factors in production must also increase. A greater product is usually the result of a greater investment and of a greater outlay for wages, etc. This is true in most cases. There are exceptions to the rule, however. At least, this is so when shorter periods only are considered. This is also borne out by the facts presented here. Going back through the tables it is easy to find instances where, for some one industry, some of the elements seem to have been affected by one tendency and others by another. At first sight such instances are apt to convey a wrong impression of the value of these presentations. They are apt to make one feel that there is an error somewhere. Either the original reports were wrong, or else there is an error in computation. Neither, however, is likely to be true. Causes which result in uneven or incongruous changes in the factors of production must be looked for elsewhere. They are apt to be found in fluctuation in prices, temporary withdrawals of capital, improved methods, etc. As a rule, however, the effects of such conditions are only temporary. They are only felt until a general readjustment has taken place. These are facts which should be borne in mind by all who may have occasion to examine these tables more closely.

SUMMARIES OF CONCLUSIONS.

The facts as compiled from the returns of 1,152 manufacturing establishments for the years 1899 and 1900 have thus been presented and analyzed in the preceding pages of this part. The presentations are made by industries and in the simplest manner possible. The analysis is mostly confined to comparisons of aggregates as between the two years. A few of the more important conclusions that have been pointed out may for the sake of convenience be summarized here.

While the greater proportion of the industries included in this investigation are important, no matter what standpoint they are viewed from, there are eighteen among them which are especially prominent in this respect, and these are:

Agricultural implements, beef and pork packing, boots and shoes, chairs, clothing, electric and gas apparatus and supplies, flour and feed, furniture, iron (malleable), knit goods, lager beer, leather, lumber, machinery, paper and pulp, sash, doors, etc., sheet metal goods, wagons, carriages, etc.

The eighteen industries thus enumerated occupy a prominent position in this state. They are the leading industries. Not only do they employ more capital and persons than any of the others but they together turn out considerably over four-fifths of the manufactures of the state. These so-called leading industries, however, are not of equal importance. This is easily seen when the tables are examined. Some among them are larger than others. In this respect lumber easily takes the first place. This industry, however, is on the wane. The main reason for this is that the lumber supply is rapidly being exhausted. Lager beer seems to be next in order, while leather, machinery, packing, paper and pulp, and flour and feed occupy conspicuous places. Wisconsin is rapidly becoming one of the leading manufacturing states in the union.

CLASSIFIED WEEKLY EARNINGS.

The classified weekly earnings were considerably higher in 1900 than in the preceding year. This is plainly shown in the

table for all industries. To measure the exact change which took place is practically impossible, owing to the difficulties which are involved in ascertaining just what each person received. Some idea of the increase, however, may be had from the fact that in 1899, 46.05 per cent. of the total number of persons employed received \$9.00 per week and over; while in 1900, 47.64 per cent. of the total number received this amount. Those who received \$1.50 per day, or over, had thus increased about 1.6 per cent. in the course of one year.

PERSONS EMPLOYED.

There was quite an improvement in the condition as to employment in 1900 as compared with 1899. In the first place the average number of persons employed throughout the year was greater. Then, again, the course of employment was more even. That is, the fluctuations in employment varied less from month to month. This has been illustrated in various ways. In the average number employed there was an increase of .36 per cent. In the smallest number employed, there was an increase of 6.27 per cent. In 1899, 15.21 per cent. of the workers were unemployed at least a part of the year, while in 1900 the unemployment for any one month never exceeded 8.48 per cent. of the total, the average unemployment being about 5 per cent. in the former year and 3 per cent. in the latter. It will be noticed that the increase in the average number of persons employed is somewhat smaller than the increase in most of the other factors. This is mostly due to the fact that there was a greater steadiness in operation in the latter year.

DAYS IN OPERATION.

There was a decrease in the number of days in operation. The reasons for this are not apparent; in fact, this change was rather unexpected. Inquiries upon this point developed the fact that more extensive repairs were required in 1900 and that this caused the decrease. The change, however, was smaller, amounting to only 2 days for all industries, or .72 per cent. But while small on the whole it was quite general, af-

fecting 39 out of the 46 industries included. Of the eighteen leading industries all but two, lager beer and machinery, show a decrease.

AVERAGE YEARLY EARNINGS.

There was an increase in the average yearly earnings to each worker during the period covered. That the earnings for the latter year should be greater was to be expected, because of the marked upward tendency of the rate of wages and of the greater stability in the course of employment. The actual increase in 1900 as compared with 1899 amounted to \$16.90, or 4.28 per cent. This is not a very great amount, still it is encouraging. The tendency which it denotes is in the right direction. Of the leading industries, eleven show an increase in earnings, and seven a decrease.

CAPITAL INVESTED.

Owing to the general expansion in business, there was an increase in the amount of the capital employed in manufacturing in 1900 over that of the preceding year, of 4.20 per cent. This increase is in full harmony with the changes in the other factors of production, and is shared in by thirty-seven of the forty-six industries included. Of the eighteen leading industries, all but flour and feed, leather, and lumber, etc., show an increase. In these cases the decreases amounted to 11.43, 2, and .19 per cent. respectively.

VALUE OF GOODS PRODUCED.

That the manufacturing industries in this state are steadily growing in productive capacity and importance is further illustrated by the facts that relate to the value of the products. The value of the output for 1900 exceeded that for 1899 by an amount equal to an increase of 8.46 per cent. This change was not alone due to a general rise in prices, but also to a larger product, as was plainly apparent from the returns of the proportion of business done. All of the industries included, however, do not show a greater product for the latter year. As in the case of the other factors considered, some

show an increase while others give a decrease. Those in the former class, however, are much more important, numbering thirty-two, as against fourteen in the latter class. Among the leading industries, the following show a decrease: Agricultural implements, 7.44 per cent.; electric and gas apparatus, 16.15 per cent.; flour and feed, 16.15 per cent.; iron (malleable), 10.70 per cent.; sheet metal goods, 2.17 per cent.; and wagons, carriages, etc., 26.22 per cent. The remaining twelve industries in this class give increases which more than offset the declines just enumerated. On the whole, it can be said that Wisconsin, during the past two years, has not only fully maintained the industrial development for which it has become known during the past decade, but is rapidly forging to the front as a manufacturing state.

TOTAL AMOUNT PAID AS WAGES.

In conformity with the general increase in the amount paid as wages was also greater in 1900 than in 1899. The increase amounted to 4.66 per cent., which corresponds closely to the rate increase in the average yearly earnings and in the capital invested, but is considerably below the rate of increase in the value of the product. Of the eighteen leading industries, all but six show an increase, the decline in the six cases being: Electric and gas apparatus, 7.44 per cent.; flour and feed, 16.15 per cent.; iron (malleable), 10.70 per cent.; sheet metal goods, 2.17 per cent.; and wagons, carriages, etc., 26.22 per cent. When all industries are included, thirty-two show an increase and fourteen a decline.

PART II.

Population in Wisconsin, 1890, 1895, 1900.

This part of the report is entirely devoted to showing the population of Wisconsin as given in the censuses in 1890, 1895, and 1900. It shows for the state and for each minor civil division of the state the total population which was enumerated, together with the increase or decrease in both the number and per cent. in 1900 as compared with 1890. The basic figures for 1890 and 1900 were obtained from the reports of the Federal census for these years, while those for 1895 were taken from the state census of that year. Both the basic figures, and the calculations made upon them are conveniently arranged and so stated that the facts for any given place can be had almost at a glance.

The main facts of these censuses, those which give the actual population and the changes which took place between each enumeration, are found in table IV. This table, as will be noticed, is quite long, covering in all about 45 pages, and is so made up as to give the situation in detail. The counties have been made the basis of classification and appear in alphabetical order. Under each county, also in alphabetical order, comes each town, city, and village located within the county. Opposite each of these units appears the number of the inhabitants in it at the time the census was taken, along with the changes which took place in these numbers during the decade which passed between the two Federal censuses. There are also other presentations in this part, some of which appear ahead of the main table, or table IV, and some after.

These tables, however, are in full harmony with the subject in hand. Some enlarge upon it by giving facts which are closely connected with those in the main table. Others, again, embody more or less fully the conclusions arrived at. Thus will be found, by counties, the population of the state at each census period since 1840; the growth of population as a whole since that period; the area in square miles of each county; summaries of population by counties, cities, and villages; the population in 1900 by congressional, senatorial and assembly districts, etc. The purpose of these presentations is to furnish facts concerning the population in this state that may be of some value and convenience to those who, for one reason or another, may desire information along this line.

That facts of this kind bearing upon the population are of some value will hardly be denied. Population statistics are useful in so many ways that it would be almost impossible to enumerate them all. They are in constant demand in the business world, by teachers, students, public officials and others. They are closely connected with social, economic, and political investigations. They are referred to everywhere and on nearly all occasions. In fact, those are few who for one purpose or another do not find it necessary or convenient to frequently consult reports giving the number of inhabitants in the various places.

It is of course true that the facts relating to population which are presented here have in some form already appeared not only in official but also in private publications. Even the newspapers have had more or less to say upon this subject. Many of them have given the facts in detail. While in these and other ways the census figures have attained a fairly wide circulation, they are not so generally accessible as to cover all demands that are made for them, and this is particularly true among the classes where the reports of this Bureau are distributed. That this should be the case is not surprising. Official reports are limited in number and go mostly to business houses and public institutions. Private publications are usually very expensive. For these and other reasons information along these lines seldom finds its way into the home of the wage earner. In view of all this as well as of the importance of the figures

in question, it is felt that the Bureau is warranted in devoting some space in this report to a few of the main facts of the last three censuses.

Wisconsin is not an old state, and still not so very young. It was organized as a territory July 3d, 1836, and admitted to statehood May 29th, 1848. Wisconsin also includes within its borders 54,450 square miles of land surface, and 1,590 square miles of water surface. The water surface is made up of numerous little lakes found in all parts of the state.

The state does not only cover a considerable area of both land and water, but is divided into many minor civil divisions. Thus it has 70 counties, 1,045 towns, and 260 incorporated places. Of the incorporated places, 115 are cities and 145 villages.

Before presenting the main table, table IV, or the one which gives the population at the last three censuses in detail, it was thought proper, by way of introduction, to give three other tables which are not only important and interesting, but closely related to the subject in hand. The first in order of these tables relates to the population in the state as a whole since 1840, and gives not only the actual population at each census period since, but the per cent. of increase between each period. The second table shows the population during the same period by counties and for the state as a whole. The third table gives, in square miles, the surface area of each county in the state at the last census. The figures presented in these tables are certainly not without value. Directly as well as indirectly they shed a great deal of light upon the growth and progress of the state during the latter half of the nineteenth century.

POPULATION: 1840 TO 1900.

Table I.

CENSUS YEARS.	Population.	INCREASE.	
		Number.	Per cent.
1840	30,945		
1850	305,391	274,446	886.9
1860	775,881	470,490	154.1
1870	1,054,670	278,789	35.9
1880	1,315,497	260,827	24.7
1890	1,688,880	371,383	28.2
1900	2,069,042	382,162	22.7

The preceding table gives a rather striking picture of the growth of this state since 1840, or four years after it was organized as a territory and eight years before being admitted as a state. In 1840, while still a territory, the population was 30,945. Ten years later, or in 1850, two years after statehood had been gained, the population had grown to 305,391, an increase of 274,446 persons, or of 886.9 per cent. In point of percentage, this is the greatest increase the state has ever experienced between any of the census periods. In point of number, however, it is exceeded by all the periods since that date save one: that between 1870 and 1880. The increase between the first two censuses given was undoubtedly largely due to immigration, not only from other states in this country, but from other countries. From 1850 to 1860 the increase amounted to 470,490 persons, or 154.1 per cent.; during the next ten years to 278,789 persons, or 35.9 per cent. In 1880 the whole population numbered 1,315,497 persons, and the increase during the period was 260,827 persons, or 24.7 per cent. In 1890 another increase of 371,383 persons was shown, and in 1900 the population stood at 2,069,042 persons. During the last ten years, there was thus an increase of 382,162 persons, or 22.7 per cent. In point of the percentage, the last decade thus shows the smallest increase in sixty years. When it comes to the actual increase, however, it is the largest, except that during the decade ending in 1860. These increases are largely due to foreign immigration, especially from the German states. The growth of the state has been constant, showing substantial and uniform gains for a series of decades.

The above table thus points out not only what the population was at each one of the censuses taken, but it gives the increase between each, both in number and per cent. In the next table in order, which covers about two pages, will be found the population of the state by counties. This table presents some interesting features. Besides the actual population for each county at each census, which will enable comparisons showing the growth of each county from its beginning, the table also indirectly shows during which period each county was created as such.

POPULATION OF WISCONSIN BY COUNTIES.

From 1840 to 1900, Inclusive.

Table 11.

Counties.	1840.	1850.	1860.	1870.	1880.	1890.	1900.
Adams		187	6,492	6,601	6,741	6,889	9,141
Ashland ¹			515	221	1,559	20,063	20,176
Barron ²			13	538	7,024	15,416	23,677
Bayfield ³		489	353	344	564	7,390	14,592
Brown	2,107	6,215	11,796	25,168	34,078	39,164	46,369
Buffalo			3,864	11,123	15,528	15,997	16,765
Burnett ⁴			12	706	3,140	4,393	7,478
Calumet	275	1,743	7,895	12,335	16,632	16,639	17,078
Chippewa ⁵		615	1,895	8,311	15,491	25,143	33,037
Clark			789	3,450	10,715	17,708	25,848
Columbia		9,565	24,441	28,802	28,065	28,350	31,121
Crawford	1,502	2,498	8,068	13,075	15,644	15,987	17,286
Dane	314	16,639	43,922	53,096	53,233	59,578	69,435
Dodge	67	19,138	42,818	47,035	45,931	44,984	46,631
Door			2,948	4,919	11,645	15,682	17,583
Douglas			812	1,122	655	13,468	36,335
Dunn			2,704	9,488	16,817	22,664	25,643
Eau Claire			3,162	10,769	19,993	30,673	31,692
Florence ⁶						2,604	3,197
Fond du Lac	139	14,510	34,154	46,273	46,859	44,088	47,589
Forest ⁷						1,012	1,396
Grant	3,926	16,169	31,189	37,979	37,852	36,851	38,881
Green	933	8,566	19,808	23,611	21,729	22,732	22,719
Green Lake			12,653	13,195	14,483	15,163	15,797
Iowa	3,978	9,525	18,967	24,544	23,628	22,117	23,114
Iron ⁸							6,616
Jackson			4,170	7,687	13,285	15,797	17,466
Jefferson	914	15,317	30,438	34,040	32,156	33,630	34,789
Juneau			8,770	12,372	15,582	17,121	20,629
Kenosha		10,734	13,900	13,147	13,560	15,581	21,707
Kewaunee			5,530	10,128	15,807	16,153	17,212
La Crosse			12,186	20,297	27,073	33,801	42,997
Lafayette		11,531	18,134	22,659	21,279	20,265	20,959
Langlade ⁹					685	9,465	12,553
Lincoln ¹⁰					2,011	12,008	16,269

¹Parts taken to form part of Sawyer in 1883 and part of Iron in 1893.²Name changed from Dallas in 1869.³Name changed from La Pointe in 1866.⁴Part of Burnett taken to form Washburn in 1883.⁵Part taken to form part of Sawyer in 1883.⁶Organized from parts of Marinette and Oconto in 1882.⁷Organized from parts of Langlade and Oconto in 1885; part annexed to Oneida since 1890.⁸Organized from parts of Ashland and Oneida in 1893.⁹Name changed from New in 1880; part taken to form part of Forest in 1885, and part of Lincoln annexed between 1890 and 1890.¹⁰Part taken to form Oneida in 1885, and part annexed to Langlade between 1880 and 1890.

POPULATION OF WISCONSIN BY COUNTIES.

From 1840 to 1900, Inclusive.

Table II.—Continued.

Counties.	1840.	1850.	1860.	1870.	1880.	1890.	1900.
Manitowoc	235	3,702	22,416	33,364	37,506	37,831	42,261
Marathon		508	2,892	5,886	17,121	30,369	43,266
Marquette ¹					8,929	20,304	30,822
Marquette	18	8,641	8,233	8,056	8,908	9,676	10,509
Milwaukee	5,606	31,011	62,518	89,930	138,537	236,101	330,017
Monroe			8,410	16,550	21,607	23,211	28,103
Oconto ²			3,592	8,321	9,848	15,009	20,874
Oneida ³						5,010	8,876
Outagamie			9,587	18,430	28,716	38,690	46,247
Ozaukee			15,682	15,564	15,461	14,943	16,363
Pepin			2,392	4,659	6,226	6,932	7,905
Pierce			4,672	9,958	17,744	20,385	23,943
Polk			1,400	3,422	10,018	12,968	17,801
Portage	1,623	1,250	7,507	10,624	17,731	24,793	29,483
Price					785	5,258	9,106
Racine	3,475	14,973	21,360	26,740	30,922	36,268	45,644
Richland		903	9,732	15,731	18,174	19,121	19,483
Rock	1,701	20,750	36,690	59,030	38,823	43,220	51,208
St. Croix	809	624	5,392	11,035	18,966	23,139	26,830
Sauk	102	4,371	18,963	23,860	28,729	30,575	33,006
Sawyer ⁴						1,977	3,598
Shawano ⁵			829	3,166	10,371	19,236	27,476
Sheboygan	133	8,379	26,875	31,749	34,206	42,489	50,345
Taylor					2,311	6,731	11,262
Trempealeau			2,560	10,732	17,189	18,920	23,114
Vernon ⁶			11,007	18,645	23,235	25,111	28,351
Vilas ⁷							4,929
Walworth	2,611	17,862	26,496	26,972	26,249	27,860	29,259
Washburn ⁴						2,926	5,521
Washington	343	19,485	23,622	23,919	23,442	22,751	23,589
Waukesha		19,558	26,831	28,274	28,957	33,270	35,229
Waupaca			8,851	15,539	20,955	26,794	31,615
Waushara			8,770	11,279	12,687	13,507	15,972
Winnebago	135	10,167	23,770	37,279	42,740	50,097	58,225
Wood			2,425	3,912	8,981	18,127	25,865
Total	30,945	305,391	775,881	1,064,670	1,315,497	1,636,880	2,069,042

¹Part taken to form part of Florence in 1882.²Parts taken to form part of Florence in 1882 and parts of Forest in 1885.³Organized from part of Lincoln in 1885; parts taken to form Vilas and part of Iron in 1893; part of Forest annexed since 1890.⁴Organized from parts of Ashland and Chippewa in 1883.⁵Name changed from Shawanaw in 1864.⁶Name changed from Bad Ax in 1862.⁷Organized from part of Oneida in 1893.

As said already, the preceding table relates to the population by counties at each one of the seven censuses that have been taken in this state by the Federal government.

The first among the Federal censuses which affected Wisconsin was that of 1840, or the sixth in order, as the first was taken in 1790. When the first census was taken, that part of the country which now constitutes Wisconsin had, in all probability, no white settlers; at any rate, none were included in that census. At the second census, that of 1800, Wisconsin was a part of the territory of Indiana, and was credited with a population of only 115 persons. In the third census, that of 1810, there is nothing to show that Wisconsin was included. But in 1820, when it had become a part of the territory of Michigan, Wisconsin is shown to have had a population of 1,313 persons. In 1830, when the fifth census was taken, 3,635 persons are shown for Wisconsin. In 1836, Wisconsin was organized as a territory and in the sixth census, that of 1840, was included the same as the other states and territories in the Union.

The above table is interesting mainly because it gives the population of each county in the state at each census period since 1840, and thus furnishes the necessary material through which the growth since that period may be ascertained. In looking over this table, it will be noticed that the changes which took place between each census are quite marked. Population has steadily increased, as has already been pointed out. The counties have increased in number, until at the last census there were about three and one-half times as many as in 1840. In that year, for instance, the state was divided into 22 counties. Ten years later there were 31 counties. In 1860 the number stood at 68. During the next decade, however, no further subdivisions took place, which no doubt is accounted for by the civil war. This was a period of anxiety and strife, which while it lasted left little room for internal improvements. In 1880, the counties were 63 in number; in 1890, 68, and in 1900 the state had 70 counties.

Rapid as has been the subdivision into more and more counties, this increase in the number of counties has not kept pace with the increase in population. The growth in the latter case,

however, is more difficult to follow, owing to the frequently recurring subdivision into new counties. At least is this found to be so when an effort is made to trace the growth by counties instead of for the state as a whole.

The following table shows, by counties, in square miles, the land area for the state as given in the last census :

TABLE III.—AREA IN SQUARE MILES OF EACH OF THE 70 COUNTIES IN THE STATE, ALSO TOTAL AREA OF THE STATE. WISCONSIN, 54,450 SQUARE MILES.

Counties.	Square miles.	Counties.	Square miles.	Counties.	Square miles.
Adams	682	Iron	786	Racine	323
Ashland	930	Jackson	978	Richland	576
Barron	678	Jefferson	548	Rock	706
Bayfield	1,497	Juneau	780	St. Croix	711
Brown	518	Kenosha	274	Sank	820
Buffalo	662	Kewaunee	827	Sawyer	1,342
Burnett	881	La Crosse	475	Shawano	1,185
Calumet	317	Lafayette	634	Sheboygan	510
Chippewa	1,538	Langlade	835	Taylor	965
Clark	1,200	Lincoln	883	Trempealeau	784
Columbia	778	Manitowoc	580	Vernon	792
Crawford	557	Marathon	1,532	Vilas	907
Dane	1,188	Marinette	1,346	Walworth	562
Dodge	884	Marquette	451	Washburn	834
Door	454	Milwaukee	228	Washington	423
Douglas	1,319	Monroe	915	Waukesha	562
Dunn	844	Oconto	1,030	Waupaca	749
Eau Claire	630	Oneida	800	Waushara	639
Florence	498	Outagamie	614	Winnebago	472
Fond du Lac	720	Ozaukee	226	Wood	785
Forest	1,421	Pepin	235		
Grant	1,157	Pierce	543	Total for state	54,450
Green	576	Polk	933		
Green Lake	364	Portage	800	Ave. each county	778
Iowa	763	Price	1,241		

The preceding table gives the number of square miles of land surface of each county in the state, together with the total area for the state, and the average to each county. The water area is not included in these figures, for the reason that in this state it is of less importance.

It is hardly necessary to say that the mere size of the state and of the various subdivisions in the state is an interesting feature. In connection with a description of the character of the soil and other sources, the number of the inhabitants and other facts, it supplies the chief material facts that are needed for a fairly accurate estimate of their economic importance, and also open up a fertile field for many other interesting comparisons and calculations.

Chippewa county is in point of area the largest in the state, covering about 1,938 square miles of land surface. The population in this county, of late, has also shown a marked increase. The result of these facts is that at the last session of the legislature of this state, which met about six months after the census was taken, subdivided Chippewa county by creating a new county, named Gates.

Ozaukee is the smallest county in the state, having a land area of only 226 square miles. Other counties with a comparatively small area are Milwaukee, Pepin, Kenosha, Racine, Calumet, etc.

With reference to their area, the several counties in the state may be classified as follows:

1,938 sq. mi. in area	1 county
Between 1,000 and 1,532 sq. mi.	12 counties
Between 500 and 1,000 sq. mi.	43 counties
Under 500 sq. mi.	14 counties
<hr/>	
Total number of counties	70 counties

From these classifications it is seen that one county alone approaches 2,000 square miles of land surface. This, as already explained, is the county of Chippewa and is now divided so as to constitute the counties of Chippewa and Gates. The next class in order includes all counties having an area of from 1,000 to 1,532 square miles, and in this are found 12 counties, or over 17 per cent. of the total. The third class embraces all counties of from 500 to 1,000 square miles in area, and of these there are 43, or over 71 per cent. of the whole number. In the last class we find 14 counties, with less than 500 square miles of area each. These 14 counties, however, while comparatively small in point of area are important in other respects. Most of them are among those that were settled the earliest, and in wealth and population some among them take a high rank.

In summing up the area of each county it is found that Wisconsin embraces within its borders a total surface area of 56,040 square miles, of which 54,450 square miles, or 97.16 per cent. is land surface, and 1,590 square miles, or 2.84 per

cent., is water surface. As there are 70 counties in the state, this is equal to an average of about 778 square miles of land and 22.7 square miles of water surface to each county.

The following table, or table IV, often designated as the main table, gives the population in 1890, 1895, by counties, towns, cities and villages, together with comparisons of the figures for 1890 and 1900, showing the increase and decrease as the case may be, in the latter year. For 1900 the population of cities is given by wards as well as the total for the city.

POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV.

Counties, Towns, Cities, Villages.	United States Census.		State Census.	Increase + Decrease — in 1900, as compared with 1890		
	1890.	1900.	1895.	No.	Pr. ct.	
ADAMS COUNTY—						
Adams town	488	588	516	+	100	+ 20.49
Big Flats town	322	560	257	+	228	+ 70.80
Colburn town ¹ .....	...	392	267			
Dell Prairie town	448	581	516	+	133	+ 29.68
Easton town	376	487	451	+	111	+ 29.52
Jackson town	504	589	556	+	86	+ 16.86
Leola town ¹	240	394	255	+	144	+ 60.00
Lincoln town	440	479	472	+	39	+ 8.86
Monroe town	462	595	452	+	133	+ 28.00
New Chester town	344	397	382	+	53	+ 15.40
New Haven town	746	693	714	+	53	+ 7.10
Preston town	209	377	217	+	168	+ 80.38
Quincy town	393	432	384	+	39	+ 9.92
Richfield town ¹	335	417	337	+	82	+ 24.47
Rome town	238	654	351	+	416	+ 174.79
Springville town	474	568	500	+	94	+ 19.83
Strong's Prairie town	870	958	955	+	88	+ 10.11
Total ..	6,889	9,141	7,532	+	2,262	+ 32.69
ASHLAND COUNTY²—						
Ashland city	9,956	13,074	12,310	+	1,318	+ 31.31
ward 1	1,445	1,262	2,588			
ward 2	1,714	1,681	2,218			
ward 3	1,772	1,503	1,382			
ward 4	2,301	928	2,272			
ward 5	2,721	1,254	2,528			
ward 6		1,435	1,352			
ward 7		1,397				
ward 8		1,559				
ward 9		1,171				
ward 10		884				
Ashland town ⁴	1,507	709		—	798	— 52.95
Butternut town	1,210	1,680		+	470	+ 38.84
Gordon town ⁵		231				
Jacobs town ⁶	1,277	1,270		—	7	— .50
La Pointe town ⁴		232				
Morse town ⁷		1,023				
Sanborn town ⁴		1,270				
La Pointe Indian Reservation ..		627				
Total ..	*20,063	20,176	17,241	+	113	+ .56

¹Colburn town was organized from parts of Leola and Richfield towns since 1890; the population of Leola and Richfield towns in 1890 was 575, and in 1900, including Colburn town, 1,193, an increase of 618, or 107.65 per cent.

²Knight and Vaughn towns taken to form part of Iron county in 1893.

³Includes population (6,113) of Knight and Vaughn towns.

⁴La Pointe and Sanborn towns organized from parts of Ashland town since 1890. Population of Ashland town in 1890 was 1,507, and for Ashland, La Pointe and Sanborn towns in 1900, 2,271, an increase of 764, or 50.6 per cent.

⁵Organized from part of Morse town since 1890.

⁶Part taken to form part of Morse town since 1890.

⁷Organized from parts of Jacobs town since 1890; part subsequently taken to form Gordon town. Gordon town, 231; Jacobs town, 1,270; Morse town, 1,023; total, 2,524 in 1900. Jacobs town in 1890, 1,277; increase of 1,247, or 97.6 per cent.

POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV—Continued.

Counties, Towns, Cities, Villages.	United States Census.		State Census.	Increase + Decrease — in 1900, as compared with 1890.	
	1890.	1900.	1895.	No.	Pr. ct.
BARRON COUNTY—					
Almena town ¹		713			
Barron city	829	1,493	1,204	+ 664	+ 80.09
Barron town	400	864	509	+ 464	+ 116.00
Cameron village ²		394	295		
Cedar Lake town	531	707	650	+ 176	+ 33.14
Chetek city ³	406	531	437	+ 125	+ 30.78
Chetek town ⁴	*1,322	692	614	- 630	- 47.65
Clinton town	479	1,289	831	+ 790	+ 164.92
Cumberland city	1,219	1,328	1,426	+ 109	+ 8.94
Cumberland town	1,546	2,259	1,840	+ 713	+ 46.11
Dallas town	1,033	1,278	1,133	+ 246	+ 23.81
Dovre town ⁵		941	716		
Maple Grove town	976	1,512	1,233	+ 536	+ 54.81
Oak Grove town	608	1,068	704	+ 490	+ 78.94
Prairie Farm town	1,047	1,428	1,212	+ 381	+ 36.39
Rice Lake city	2,130	3,002	3,162	+ 872	+ 40.93
ward 1	576	711	676		
ward 2	531	611	502		
ward 3	351	680	619		
ward 4	672	1,000	1,065		
Rice Lake town ⁷		685			
Stanford town ⁷	589	659	972	+ 70	+ 11.88
Stanley town ⁸	748	738	601	+ 10	+ 1.33
Sumner town	365	508	492	+ 143	+ 39.19
Turtle Lake town ⁹	874	695	506	+ 179	+ 20.48
Turtle Lake village ¹⁰		326			
Vance Creek town	314	566	359	+ 262	+ 80.25
Total	15,416	23,677	20,112	+ 8,261	+ 53.60
BAYFIELD COUNTY—					
Bayfield town ¹¹	527	570	1,244	+ 43	+ 8.15
Bayfield village	1,373	1,689	1,368	+ 316	+ 23.01
Drummond town ¹¹	696	790	812	+ 94	+ 13.50
Iron river town ¹²		2,439	2,624		
Mason town ¹³	1,095	1,210	740	+ 115	+ 10.50
Pratt town ¹⁴		482			
Washburn town ¹⁵	3,699	6,814	5,807	+ 3,115	+ 84.21
Red Cliff Indian Reservation		398			
Total	7,390	14,392	12,585	+ 7,002	+ 94.75

¹Organized from part of Turtle Lake town since 1890.²Organized from part of Stanley town since 1890.³Formerly in Chetek town, incorporated since 1890.⁴Included in Chetek village in 1890; part taken to form Dovre town since 1890.⁵Exclusive of population of Chetek village.⁶Organized from part of Chetek town since 1890. In 1900 Chetek city had 531, Chetek town 692, Dovre town 941, total 2,164; in 1890 Chetek village had 406, Chetek town 1,322, total 1,728; increase 436 or 25.2 per cent.⁷Rice Lake town organized from part of Stanford town since 1890; in 1900 Rice Lake town had 685, Stanford town 659, total 1,344; in 1890 Stanford town had 589; increase 755 or 128.1 per cent.⁸Part taken to form Cameron village since 1890; in 1900 Cameron village had 394, Stanley town 738, total 1,132; in 1890 Stanley town had 748; increase 384 or 51.3 per cent.⁹Part taken to form Almena town since 1890.¹⁰Organized from part of Almena town since 1890. In 1900 Almena town, Turtle Lake town and Turtle Lake village was respectively 713, 695, 326; total 1,734; in 1890 Turtle Lake town had 874; increase 853 or 98.3 per cent.¹¹Part taken to form Iron River town since 1890.¹²Organized from parts of Bayfield, Drummond, Mason and Washburn towns since 1890.¹³Parts taken to form Pratt and Iron River towns since 1890.¹⁴Organized from parts of Mason town since 1890. In 1900 Bayfield town had 570, Drummond town 790, Iron River town 2,439, Mason 1,210, Pratt 482, Washburn 6,814, total 12,305; in 1890 Bayfield 527, Drummond 596, Mason 1,095, Washburn 3,699, total 6,017; increase 6,288 or 104.5 per cent.

POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV—Continued.

Counties, Towns, Cities, Villages.	United States Census.		State Census.	Increase + Decrease — in 1900, as compared with 1890	
	1890.	1900.	1895.	No.	Pr. ct.
BROWN COUNTY—					
Allouez town	363	720	378	+ 357	+ 98.34
Ashwaubenon town	479	540	558	+ 61	+ 12.73
Bellevue town	838	864	869	+ 26	+ 3.10
Depere City	3,625	4,038	4,292	+ 413	+ 11.39
ward 1	1,028				
ward 2	987				
ward 3	1,142				
ward 4	881				
Depere town	969	893	1,012		
Eaton	1,102	1,154	1,249		
Glenmore	1,441	1,421	1,559		
Green Bay City ¹	9,069	18,684	18,290	+ 9,615	+106.02
ward 1	2,995				
ward 2	2,062				
ward 3	1,509				
ward 4	2,758				
ward 5	2,587				
ward 6	2,658				
ward 7	1,679				
ward 8	2,436				
Green Bay town	1,008	920	971	— 88	— 8.73
Holland town	1,249	1,257	1,323	+ 8	+ .64
Howard town	1,261	1,509	1,562	+ 248	+ 19.65
Humboldt town	1,068	1,043	1,102	+ 25	+ 2.34
Lawrence town	949	1,048	1,044	+ 99	+ 10.43
Morrison town	1,449	1,493	1,520	+ 44	+ 3.03
New Denmark town	1,553	1,474	1,568	+ 79	+ 5.08
Pittsfield town	941	1,411	1,374	+ 470	+ 49.94
Preble town	1,160	1,967	1,536	+ 797	+ 68.76
Rockland town	800	838	838	+ 38	+ 4.75
Scott town	1,238	1,177	1,293	+ 111	+ 8.61
Snamico town	906	1,228	1,099	+ 322	+ 35.64
Wrightstown town ²	*1,693	1,575	3,267	+ 118	+ 6.97
Wrightstown village ³	476	420		— 56	— 11.76
Onelda Indian Reservation (part of)	723	696		— 28	— 3.87
Total for Onelda Indian Reservation, in Brown and Outagamie counties	1,646	1,704		+ 58	+ 3.52
Total	*39,164	46,359	45,623	+ 7,195	+ 18.37
BUFFALO COUNTY—					
Alma city	1,428	1,201	1,529	— 227	— 15.89
Alma town	710	665	707	— 55	— 7.74
Belvidere town	750	749	749	— 1	— .13
Buffalo city	223	254	291	+ 31	+ 13.89
Buffalo town	647	694	691	+ 47	+ 7.26
Canton town	744	789	763	+ 45	+ 6.04
Cross town	671	621	652	— 50	— 7.45
Dover town	757	861	798	+ 104	+ 13.73
Fountain City	972	1,031	1,065	+ 59	+ 6.07

¹Fort Howard city annexed since 1890.²In 1900 Wrightstown town had 1,575. Wrightstown village 420, total 1,995; in 1890 Wrightstown, excluding village, had 1,693, Wrightstown village 476; decrease 174 or 8 per cent.³Exclusive of Wrightstown village.⁴Includes population (4,754) of Howard city.

POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV—Continued.

Counties, Towns, Cities, Villages.	United States Census.		State Census.	Increase + Decrease — in 1900, as compared with 1890	
	1890.	1900.		No.	Pr. ct.
BUFFALO COUNTY—Continued.					
Gilmanton town	599	829	723 +	230 +	38.39
Glencoe town	692	787	805 +	96 +	13.72
Lincoln town	556	589	568 +	33 +	5.93
Maxville town	602	666	653 +	64 +	10.63
Milton town	389	366	366 —	23 —	5.91
Modena town	828	872	892 +	44 +	5.31
Mondovi city	503	1,208	923 +	705 +	140.15
Mondovi town	587	622	644 +	35 +	5.96
Montana town	840	767	803 +	73 +	8.69
Naples town	727	886	806 +	159 +	21.87
Nelson town	1,919	1,505	1,682 +	414 +	21.57
Waumandee town	853	813	912 —	40 —	4.68
Total	15,997	16,765	16,931 +	768 +	4.79
BURNETT COUNTY—					
Grantsburg town	1,447	1,688	1,713 +	241 +	16.65
Grantsburg village	410	612	518 +	202 +	49.26
Marshland town ¹	678	708	1,148 +	30 +	4.42
Meenon town ¹		1,252			
Rusk town	222	630	437 +	398 +	171.55
Trade Lake town	825	1,174	1,091 +	349 +	42.30
Wood Lake town	801	1,414	885 +	613 +	76.52
Total	4,393	7,478	5,892 +	3,085 +	70.22
CALUMET COUNTY—					
Brillion town	1,510	1,563	1,661 +	53 +	3.51
Brillion village	582	855	874 +	273 +	46.89
Brothertown town	1,629	1,539	1,630 —	90 —	5.52
Charlestown town	1,362	1,343	1,326 —	19 —	1.39
Chilton city	1,424	1,460	1,601 +	36 +	2.52
Chilton town	1,349	1,350	1,376 +	1 +	.07
Harrison town	1,987	2,022	2,174 +	35 +	1.76
Hilbert village ¹		497			
New Holstein town	1,735	1,893	1,846 +	158 +	9.10
Rantoul town ²	1,686	1,299	1,758 +	387 +	22.95
Stockbridge town	1,948	1,942	2,023 —	6 —	.31
Woodville town	1,427	1,315	1,475 —	112 —	7.84
Total	16,639	17,028	17,744 +	429 +	2.64
CHIPPEWA COUNTY—					
Anson town	533	697	634 +	164 +	30.76
Arthur town	622	924	618 +	302 +	48.55
Auburn town	1,584	1,678	1,584 +	94 +	5.93
Big Bend town	890	1,854	1,117 +	1,034 +	126.09
Bloomer town ⁴	1,720	1,470	1,979 +	250 +	14.53
Bloomer village	631	811	669 +	190 +	28.52
Boyd village ⁴	545	674	738 +	129 +	23.67
Cadott village ⁴	889	840	838 —	49 —	5.51

¹Meenon town organized from part of Marshland town since 1890; in 1890 Marshland town had 678; in 1900 Marshland had 708 and Meenon 1,252, total 1960; increase 1,282 or 189.1 per cent.

²Hilbert village organized from part of Rantoul town since 1890; in 1900 Hilbert village had 497 and Rantoul 1,299, total 1,796; in 1890 Rantoul had 1,686; increase 110 or 6.5 per cent.

³Parts taken to form Strickland and part of Sampson town since 1890.

⁴Formerly in Edison town, now independent.

⁵Cadott village formerly in Sigel town, now independent. In 1900 Sigel town had 911. Cadott village 840, total 1,751; in 1890 Cadott village had 889 and Sigel town 696; increase 164 or 10.3 per cent.

POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV—Continued.

Counties, Towns, Cities, Villages.	United States Census		State Census.	Increase + Decrease — in 1900, as compared with 1890	
	1890.	1900.	1895.	No.	Pr. ct.
CHIPPEWA COUNTY—Con.					
Chippewa Falls city	8,670	8,094	9,196	— 576	— 6.64
ward 1	929	1,065	1,157	.....	.....
ward 2	1,174	1,189	1,311	.....	.....
ward 3	1,398	1,068	1,440	.....	.....
ward 4	685	562	682	.....	.....
ward 5	920	994	1,042	.....	.....
ward 6	902	841	968	.....	.....
ward 7	647	619	694	.....	.....
ward 8	896	711	730	.....	.....
ward 9	683	620	727	.....	.....
ward 10	436	425	456	.....	.....
Cleveland town ¹	395	577	553	+ 182	+ 46.07
Colburn town ²	347	513	457	+ 66	+ 19.02
Dewey town ³ .....	.....	683	.....	.....	.....
Eagle Point town	1,282	1,398	1,296	+ 116	+ 9.04
Edson town ⁴	1,619	1,986	2,886	+ 367	+ 22.66
Flambeau town	289	763	417	+ 474	+ 164.61
Lafayette town	1,514	1,797	1,383	+ 283	+ 18.69
Lawrence town ⁵	272	793	412	+ 521	+ 191.54
Sampson town ⁶ .....	.....	626	.....	.....	.....
Sigel town ¹¹	698	911	786	+ 213	+ 30.51
Stanley city ⁷ .....	.....	2,387	.....	.....	.....
ward 1 .....	.....	956	.....	.....	.....
ward 2 .....	.....	707	.....	.....	.....
ward 3 .....	.....	724	.....	.....	.....
Strickland town ⁸ .....	.....	288	.....	.....	.....
Tilden town	1,313	1,413	1,422	+ 100	+ 7.61
Wheaton town	1,400	1,860	1,743	+ 460	+ 32.86
Total	25,143	33,037	28,727	+ 7,894	+ 31.39
CLARK COUNTY—					
Abbotsford village ⁹ .....	.....	443	.....	.....	.....
Beaver town	355	622	.....	+ 267	+ 75.21
Colby city (west ward) ¹⁰ .....	.....	454	.....	.....	.....
Total for Colby city in Clark and Marathon counties .....	.....	667	.....	.....	.....

¹Part taken to form Sampson town since 1890. Organized from part of Bloomer and Cleveland towns since 1890. In 1900 Cleveland town had 577, Bloomer town had 1,470, Sampson town 626; in 1890 Cleveland 395, Bloomer town 1,720, total 2,115; increase 558 or 26.3 per cent.

²Dewey town organized from parts of Colburn and Lawrence since 1890. In 1900 Dewey town had 683, Colburn 513, and Lawrence 793, total 1,989; in 1890 Colburn town had 347, Lawrence 272, total 619; increase 1,370 or 221.3 per cent.

³Included in Boyd village in 1890; part taken to form Stanley city since 1890.

⁴Exclusive of Boyd village, in 1900 Boyd village had 674, Edson town 1,986, Stanley city 2,387, total 5,047; in 1890 Boyd village had 845, Edson town 1,619, total 2,464; increase 2,883 or 123.2 per cent.

⁵Organized from parts of Bloomer and Cleveland towns since 1890. In 1890 Bloomer town 1,720; Cleveland 395, total 2,115; in 1900 Bloomer 1,470, Cleveland 577, Sampson town 626, Strickland 288, total 2,961; increase 846 or 4 per cent.

⁶Exclusive of population of Cadott village.

⁷Organized from part of Edson town since 1890. In 1890 Edson town had 1,619; in 1900 Edson had 1,986, Stanley city 2,387, total 4,993; increase 2,754 or 170 per cent.

⁸Organized from parts of Bloomer town since 1890. In 1890 Bloomer town had 1,720; in 1900 Bloomer had 1,470, Strickland town 288; increase 38 or 2.2 per cent.

⁹Organized from parts of Colby and Maville towns since 1890.

¹⁰Organized from parts of Colby town since 1890.

¹¹Cadott village was formerly in Sigel town, now independent.

POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV—Continued.

Counties, Towns, Cities, Villages.	United States Census.		State Census.	Increase + Decrease — in 1900, as compared with 1890	
	1890.	1900.	1895.	No.	Pr. ct.
CLARK COUNTY—Continued					
Colby town ¹	1,106	754	748	— 352	— 31.82
Eaton town ²	707	602	479	— 106	— 14.85
Fremont town	411	762	497	+ 351	+ 85.40
Grant town	1,143	1,277	1,212	+ 134	+ 11.72
Green Grove town	242	354	319	+ 112	+ 46.24
Greenwood city ³		708	559		
Hewett town	151	292	223	+ 141	+ 93.37
Hixon town ⁴	578	831	874	+ 253	+ 43.77
Hoard town	310	525	372	+ 215	+ 69.35
Levis town	329	745	481	+ 417	+ 126.75
Longwood town ⁵		422			
Loyal town ⁶	979	995	937	+ 16	+ 1.63
Loyal village ⁷		645	418		
Lynn town	453	711	513	+ 258	+ 56.96
Mayville town ⁸	1,450	1,581	1,398	+ 131	+ 9.03
Mead town ⁹		103			
Mentor town	684	1,009	842	+ 325	+ 47.51
Neillsville city	1,936	2,104	2,206	+ 168	+ 8.67
ward 1	607	671	796		
ward 2	736	642	679		
ward 3	594	791	731		
Pine Valley town	886	1,130	1,032	+ 244	+ 27.54
Reseburg town ¹⁰		615	486		
Sherman town	470	615	533	+ 145	+ 30.85
Sherwood Forest town	155	231	182	+ 76	+ 49.03
Thorp town ¹¹	704	856	635	+ 152	+ 21.58
Thorp village ¹²	723	838	829	+ 115	+ 15.90
Unity town	722	855	734	+ 133	+ 18.42
Warner town	591	617	635	+ 26	+ 4.39
Washburn town	200	522	315	+ 322	+ 161.00
Weston town	863	1,000	889	+ 137	+ 15.87
Withee town ¹³	724	1,004	628	+ 280	+ 38.67
Worden town ¹⁴		645	415		
York town	836	990	927	+ 144	+ 17.22
Total	17,708	25,848	21,342	+ 8,140	+ 45.96

¹Part taken to form Colby city and part of Abbotsford village since 1890.

²Part taken to form part of Abbotsford village since 1890. In 1890 Colby town had 1,106. Mayville town 1,460, total 2,566; in 1900 Abbotsford village had 443, Colby city "westward" 454, Colby town 754, Mayville town 1,581, total 3,232; increase 676 or 26.4 per cent.

³Part taken to form Greenwood city since 1890.

⁴Organized from parts of Eaton and Warner towns since 1890.

⁵Organized from part of Warner town since 1890. In 1890 Eaton town had 707, Warner town 591, total 1,298; in 1900 Eaton town had 802, Greenwood city 708, Mead town 108, Warner town 617, total 2,080; increase 732 or 56.4 per cent.

⁶Longwood and Reseburg towns organized from parts of Hixon town since 1890. In 1890 Hixon town had 578; in 1900 Hixon town had 831, Longwood town 422, Reseburg town 615, total 1,868; increase 1,290 or 223.1 per cent.

⁷Loyal village organized from part of Loyal town since 1890. In 1890 Loyal town had 913; in 1900 including Loyal village 1,640; increase 661 or 67.5 per cent.

⁸Included part of Thorp village in 1890. Part taken to form Worden town since 1890.

⁹Exclusive of population of Thorp village.

¹⁰Formerly in Thorp and Withee towns; now independent.

¹¹Included part of Thorp village in 1890.

¹²Organized from part of Thorp town since 1890. In 1890 Thorp town had 704, Thorp village 723, and Withee town 724; in 1900 Thorp town had 856, Thorp village 838, Withee town 1,004, and Worden town 645; an increase of 1,192 or 55.4 per cent.

POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV—Continued.

Counties, Towns, Cities, Villages.	United States Census.		State Census.	Increase + Decrease — in 1900, as compared with 1890	
	1890.	1900.	1895.	No	Pr. ct.
COLUMBIA COUNTY—					
Arlington town	828	794	843	—	34 — 4.10
Caledonia town	1,336	1,188	1,318	—	148 — 11.08
Cambria village ¹	624	561	570	+	37 + 70.61
Columbus city	1,977	2,349	2,287	+	372 + 18.81
ward 1		875	811		
ward 2		700	671		
ward 3		774	806		
Columbus town	800	744	798	—	56 — 7.00
Courtland town ²	815	820	875	+	5 + .61
Dekorra town ³	889	908	873	+	39 + 4.48
Fort Winnebago town	646	655	645	—	9 — 1.39
Fountain Prairie town	1,315	1,409	1,365	+	94 + 7.14
Hampden town	861	887	935	+	26 + 3.02
Kilbourn City village ⁴	961	1,134	1,207	+	173 + 18.00
Leedstown	1,171	1,214	1,217	+	43 + 3.67
Lewistown	936	901	934	—	36 — 3.73
Lodi town ¹⁰	1,639	750	743	+	111 + 17.37
Lodi village ¹⁰		1,068	975	+	332 + 45.10
Lowville town	736	784	821	+	51 + 6.96
Marcellon town	733	882	853	+	37 + 4.37
Newport town ⁵	487	585	544	+	98 + 20.12
Otsego town	1,127	1,226	1,266	+	99 + 8.78
Pacific town	256	289	272	+	34 + 13.33
Pardeeville village ¹²		788	574		
Portage city	5,143	5,459	5,419	+	316 + 6.14
ward 1		658	667		
ward 2		1,032	1,012		
ward 3		900	923		
ward 4		1,287	1,316		
ward 5		1,582	1,501		
Poynette village	517	633	593	+	116 + 22.43
Randolph town ⁶	880	951	912	+	71 + 8.07
Randolph village ⁸ (westward)	79	190	134	+	111 + 140.50
Total for Randolph village in Columbia and Dodge counties	405	738		+	333 + 82.22
Rio village	339	479	432	+	140 + 41.29
Scott town	824	811	882	—	13 — 1.57
Springdale town	703	751	718	+	48 + 6.82
West Point town	701	743	759	+	42 + 5.99
Wyocena town ¹²	1,303	1,158	1,118	—	145 — 11.12
Total	28,350	31,121	30,868	+ 2,771	+ 9.77

¹Formerly in Courtland and Randolph towns, now independent.²Included part of Cambria village in 1890; part annexed to Randolph village since 1890.³Exclusive of population of Cambria village.⁴Included part of Cambria village in 1890.⁵Part of Courtland town annexed since 1890. In 1890 Cambria village had 524, Courtland 815, Randolph 880 and Randolph village (westward) 79, total 2,298; in 1900 Cambria village had 561, Courtland 820, Randolph 951, Randolph village "westward" 190, total 2,522; increase 224 or 9.7 per cent.⁶Poynette village, formerly in Dekorra town, now independent.⁷Exclusive of population of Poynette village. In 1890 Dekorra had 889, Poynette village 517, total 1,386; in 1900 Dekorra 908, Poynette 633, total 1,541; increase 155 or 11.2 per cent.⁸Kilbourn City village, formerly in Newport town, now independent.⁹Exclusive of population of Kilbourn City village. In 1890 Kilbourn City village had 961, Newport town 487, total 1,448; in 1900 Kilbourn City village had 1,134, Newport town 585, total 1,719; increase 271 or 18.7 per cent.¹⁰Lodi village, formerly in Lodi town, now independent.¹¹Exclusive of population of Lodi village. In 1890 Lodi town had 639, Lodi village 736, total 1,375; in 1900 Lodi town 750, Lodi village 1,068, total 1818; increase 443 or 32.2 per cent.¹²Pardeeville village organized from part of Wyocena town since 1890. In 1900 Pardeeville village 788, Wyocena town 1,158, total 1,946; in 1890 Wyocena 1,303; increase 643 or 49.3 per cent.

POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV—Continued.

Counties, Towns, Cities, Villages.	United States Census.		State Census.	Increase + Decrease — in 1900, as compared with 1890	
	1890.	1900.	1895.	No.	Pr. ct.
CRAWFORD COUNTY—					
Bridgeport town	410	357	397	— 53	— 12.92
Clayton town ¹	2,060	2,080	1,968	+ 30	+ 1.46
De Soto village (part of) ²	79	87	111	+ 8	+ 10.12
Total for De Soto village in Crawford and Vernon counties	355	387	.....	+ 32	+ 9.01
Eastman town	1,436	1,471	1,483	+ 35	+ 2.43
Freeman town ³	1,417	1,533	1,647	+ 116	+ 8.19
Haney town	738	868	924	+ 130	+ 17.61
Lynxville village	243	322	310	+ 79	+ 32.51
Marietta town	1,300	1,262	1,285	— 38	— 2.92
Prairie du Chien city	3,131	3,232	3,286	+ 101	+ 3.22
ward 1	629	626	695	.....	.....
ward 2	1,131	1,049	1,085	.....	.....
ward 3	1,063	1,211	1,146	.....	.....
ward 4	308	346	360	.....	.....
Prairie du Chien town	602	596	592	— 7	— 1.12
Scott town	1,079	1,004	1,077	— 75	— 6.95
Seneca town	1,197	1,200	1,158	+ 3	+ .26
Soldiers Grove village ⁴ .....	.....	680	450	.....	.....
Utica town	1,389	1,548	1,497	+ 159	+ 11.44
Wauzeka town ⁵	916	576	607	— 340	— 37.11
Wauzeka village ⁶ .....	.....	471	411	.....	.....
Total	15,987	17,286	17,203	+ 1,299	+ 8.12
DANE COUNTY—					
Albion town	1,516	1,590	1,538	+ 74	+ 4.88
Belleville village ⁷	319	385	409	+ 66	+ 20.68
Berry town	1,003	934	1,012	— 69	— 6.87
Black Earth town	742	796	809	+ 54	+ 7.27
Blooming Grove town	999	1,119	1,067	+ 120	+ 12.01
Blue Mounds town ⁸	1,449	1,048	1,069	— 401	— 27.67
Bristol town	1,093	1,268	1,193	+ 175	+ 16.01
Burke town	1,129	1,230	1,247	+ 101	+ 8.94
Christiana town	2,379	2,401	2,380	+ 22	+ .92
Cottage Grove town	1,305	1,307	1,319	+ 2	+ .15
Cross Plains town	1,103	1,206	1,171	+ 103	+ 9.33
Dane town ⁹	1,161	933	976	— 228	— 19.63
Dane village ⁹ .....	.....	280	274	.....	.....
Deerfield town ¹⁰	1,235	1,104	1,200	— 131	— 10.60
Deerfield village ¹⁰	338	515	519	+ 177	+ 52.36

¹Soldiers Grove village, formerly Clayton town, now independent.²Includes population of Soldiers Grove village, not separately returned in 1890.³In 1900 Clayton town had 2,080, Soldiers Grove village 680, total 2,760; in 1890 Clayton town had 2,050; increase 710 or 34.63 per cent.⁴De Soto village, formerly in Freeman town, now independent.⁵Exclusive of population of De Soto village. In 1890 De Soto village (part of) had 79, Freeman town 1,417; total 1,496; in 1900 De Soto village had 87, Freeman town 1,533, total 1,620; increase 124 or 8.23 per cent.⁶Wauzeka village organized from part of Wauzeka town since 1890. In 1890 Wauzeka town had 576, Wauzeka village 471, total 1,047; in 1890 Wauzeka town had 916; increase 131 or 14.3 per cent.⁷Belleville village, formerly in Montrose town, now independent.⁸Exclusive of population of Belleville village. In 1890 Belleville village had 319, Montrose town 932, total 1,251; in 1900 Belleville village 385, Montrose town 997, total 1,382; increase 131 or 10.47 per cent.⁹Mt. Horeb village organized from part of Blue Mounds town since 1890. In 1900 Blue Mounds town 1,048, Mt. Horeb village 864, total 1,912; in 1890 Blue Mounds town 1,449; increase 463 or 31.9 per cent.¹⁰Dane village organized from Dane town since 1890. In 1900 Dane town had 933, Dane village 280; in 1890 Dane town had 1,161; increase 52 or 4.47 per cent.¹¹Deerfield village, formerly in Deerfield town, now independent.¹²Exclusive of population of Deerfield village; 1890 Deerfield town had 1,235, Deerfield village 338, total 1,573; in 1900 Deerfield town 1,104, Deerfield village 515, total 1,619; increase 46 or 2.9 per cent.

POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV—Continued.

Counties, Towns, Cities, Villages.	United States Census.		State Census.	Increase + Decrease — in 1900 as compared with 1890	
	1890.	1900.	1895.	No.	Pr. ct.
DANE COUNTY—Continued.					
Dunkirk town	1,406	1,536	1,574	+	130 + 9.24
Dunn town	1,113	1,165	1,167	+	42 + 3.77
Fitchburg town	958	1,004	1,046	+	46 + 4.80
Madison city	18,426	19,164	15,950	+	5,738 + 42.73
ward 1	2,845	1,855	3,125	.....	.....
ward 2	2,943	2,456	3,341	.....	.....
ward 3	1,512	1,588	1,757	.....	.....
ward 4	2,284	3,030	2,687	.....	.....
ward 5	2,164	3,401	3,003	.....	.....
ward 6	1,678	2,882	2,037	.....	.....
ward 7 .....	.....	1,619	.....	.....	.....
ward 8 .....	.....	2,133	.....	.....	.....
Madison town	919	1,567	1,251	+	648 + 70.51
Mazomanie town ¹	448	498	503	+	45 + 10.02
Mazomanie village ¹	1,034	902	1,015	—	132 — 12.76
Medina town	1,393	1,484	1,499	+	91 + 6.53
Middleton town	1,433	1,550	1,508	+	117 + 8.16
Montrose town ²	932	997	1,018	+	65 + 6.97
Mt. Horeb village ³ .....	.....	864	654	.....	.....
Oregon town ⁴	441	881	802	+	40 + 4.75
Oregon village ⁵	595	697	637	+	102 + 17.10
Perry town	996	1,050	997	+	54 + 5.42
Pleasant Springs town	1,501	1,453	1,510	—	48 — 3.19
Primrose town	889	817	802	—	72 — 8.09
Roxbury town	1,073	966	999	—	107 — 9.97
Rutland town	1,222	1,297	1,320	+	75 + 6.13
Springdale town	1,120	1,060	1,136	—	70 — 6.24
Springfield town	1,111	1,108	1,154	—	3 — .27
Stoughton city	2,470	3,431	2,936	+	961 + 38.90
ward 1 .....	.....	1,351	.....	.....	.....
ward 2 .....	.....	2,080	.....	.....	.....
Sun Prairie town	912	1,039	995	+	127 + 13.92
Sun Prairie village	704	938	823	+	234 + 33.23
Vermont town	892	826	890	—	66 — 7.39
Verona town	1,225	1,335	1,251	+	110 + 8.98
Vienna town	1,009	1,048	1,155	+	39 + 3.86
Waunakee village ⁶	312	443	490	+	131 + 41.98
Westport town ⁷	1,581	1,472	1,543	—	109 — 6.79
Windsor town	1,329	1,809	1,757	+	480 + 36.11
York town	963	943	973	—	20 — 2.06
Total	59,578	69,435	65,629	+	9,857 + 16.64

¹Mazomanie village, formerly in Mazomanie town, now independent.²Exclusive of population of Mazomanie village. In 1890 Mazomanie town had 448, Mazomanie village 1,034, total 1,482; in 1900 Mazomanie town had 493, Mazomanie village 902, total 1,395; decrease 87 or 5.87 per cent.³Oregon village, formerly in Oregon town, now independent.⁴Exclusive of population of Oregon village. In 1890 Oregon town had 841, Oregon village 595, total 1,436; in 1900 Oregon town had 881, Oregon village 697, total 1,578; increase 142 or 9.88 per cent.⁵Waunakee village, formerly in Westport town, now independent.⁶Exclusive of population of Waunakee village. In 1890 Waunakee village had 312, Westport town 1,581, total 1,893; in 1900 Waunakee village had 443, Westport town 1,472, total 1,915; increase 22 or 1.16 per cent.

POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV—Continued.

Counties, Towns, Cities, Villages.	United States Census.		State Census.	Increase + Decrease — in 1900, as compared with 1890	
	1890.	1900.	1895.	No.	Pr. ct.
DODGE COUNTY—					
Ashipun town	1,344	1,339	1,373	— 5	— .37
Beaver Dam city	4,222	6,128	5,042	+ 906	+ 21.46
ward 1		822	831		
ward 2		1,406	1,335		
ward 3		1,493	1,397		
ward 4		1,408	1,479		
Beaver Dam town	1,341	1,340	1,376	— 1	— .07
Burnett town	1,026	1,061	1,109	+ 85	+ 3.41
Calamus town	1,083	1,096	1,113	+ 13	+ 1.20
Chester town		736	737	+ 29	+ 8.94
Clyman town	1,293	1,236	1,219	— 57	— 4.40
Elba town	1,117	1,066	1,091	— 51	— 4.56
Emmet town	1,248	1,152	1,303	+ 96	+ 7.69
Fox Lake town ¹	802	741	880	+ 61	+ 7.60
Fox Lake village ¹	814	890	1,003	+ 76	+ 9.33
Herman town	1,478	1,394	1,439	+ 84	+ 5.68
Horicon city ³	1,354	1,376	1,513	+ 22	+ 1.62
Hubbard town	1,690	1,563	1,719	+ 127	+ 7.61
Hustisford town	1,639	1,606	1,665	+ 33	+ 2.01
Juneau city		701	793	+ 190	+ 27.10
Lebanon town	1,505	1,469	1,474	+ 36	+ 2.39
Leroy town	1,413	1,344	1,493	+ 69	+ 4.88
Lomira town ⁴	1,816	1,560	1,881	+ 266	+ 14.09
Lomira village ⁴		492			
Lowell town ⁵	1,859	1,713	1,811	+ 146	+ 7.85
Lowell village ⁵		304	331	+ 29	+ 9.54
Mayville city ⁷	1,165	1,815	1,539	+ 650	+ 55.79
ward 1		486			
ward 2		420			
ward 3		909			
Oak Grove town	1,599	1,554	1,718	+ 45	+ 2.81
Portland town	1,163	1,129	1,171	+ 34	+ 2.92
Randolph village (east ward) (For total see Columbia Co.)	326	548	454	+ 222	+ 68.39
Reeseville village ⁶	329	393	396	+ 64	+ 19.45
Rubicon town	1,520	1,449	1,472	+ 71	+ 4.66
Shields town	919	868	949	+ 51	+ 5.54
Theresa town ⁸	1,761	1,433	1,490	+ 328	+ 18.62
Theresa village ⁸		355	272		
Trenton town	1,472	1,429	1,562	+ 43	+ 2.92

¹Fox Lake village, formerly in Fox Lake town, now independent.

²Exclusive of population of Fox Lake village. In 1890 Fox Lake town had 802, Fox Lake village 814, total 1,616; in 1900 Fox Lake town had 741, Fox Lake village 890, total 1,631; increase 15 or .9 per cent.

³Incorporated as a city since 1890.

⁴Lomira village organized from part of Lomira town since 1890. In 1900 Lomira town had 1,560, Lomira village 492, total 2,052; in 1890 Lomira town had 1,816; increase 236 or 12.99 per cent.

⁵Lowell and Reeseville villages, formerly in Lowell town, now independent.

⁶Exclusive of population of Lowell and Reeseville villages. In 1890 Lowell town had 1,859, Lowell village 304, and Reeseville village 329, total 2,492; in 1900 Lowell town had 1,713, Lowell village 333, and Reeseville village 393, total 2,439; decrease 53 or 2.1 per cent.

⁷Part of Williamstown town annexed to Mayville city since 1890. In 1890 Mayville city had 1,165, Williamstown town 1,031, total 2,196; in 1900 Mayville city had 1,815, Williamstown town 1,015, total 2,830; increase 634 or 28.87 per cent.

⁸Theresa village organized from part of Theresa town since 1890. In 1900 Theresa town had 1,433, Theresa village 355, total 1,788; in 1890 Theresa town had 1,761; increase 27 or 1.53 per cent.

POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV—Continued.

Counties, Towns, Cities, Villages.	United States Census.		State Census.	Increase + Decrease — in 1900, as compared with 1890	
	1890.	1900.	1895.	No.	Pr. ct.
DODGE COUNTY—Continued					
Watertown city (wards 5 and 6)	2,249	2,170	2,471	— 79	— 3.51
Total for Watertown city, in Dodge and Jefferson counties.	8,755	8,437	.....	— 318	— 3.63
ward 1	2,352	.....	.....	.....	.....
ward 2	1,430	.....	.....	.....	.....
ward 3	929	.....	.....	.....	.....
ward 4	533	.....	.....	.....	.....
ward 5	902	.....	.....	.....	.....
ward 6	1,268	.....	.....	.....	.....
ward 7	1,008	.....	.....	.....	.....
Waupun city (south ward).....	1,695	2,067	2,011	+ 372	+ 21.94
Total for Waupun city, in Dodge and Fond du Lac counties...	2,767	3,185	.....	+ 428	+ 15.16
North ward	1,118	.....	.....	.....	.....
South ward	2,067	.....	.....	.....	.....
Westford town	970	909	992	— 61	— 6.28
Williamstown town ⁷	1,031	1,015	1,012	— 16	— 1.55
Total	44,984	46,631	.....	+ 1,647	+ 3.66
DOOR COUNTY—					
Balley Harbor town	603	645	695	+ 42	+ 6.96
Brussels town	1,085	1,287	1,200	+ 202	+ 18.61
Claybanks town	609	557	581	— 52	— 8.53
Egg Harbor town	821	882	943	+ 61	+ 7.43
Forestville town	1,361	1,364	1,352	— 3	— .22
Gardner town	805	785	833	+ 20	+ 2.48
Gibraltar town	934	1,185	1,158	+ 251	+ 26.87
Jacksonport town	817	913	955	+ 96	+ 11.75
Liberty Grove town	1,536	1,550	1,563	+ 14	+ .91
Nasewaupee town	1,067	1,349	1,194	+ 292	+ 27.62
Sevastopol town	1,313	1,607	1,576	+ 294	+ 22.39
Sturgeon Bay City ¹	2,195	3,372	2,790	+ 1,167	+ 53.16
ward 1 .....	.....	1,299	.....	.....	.....
ward 2 .....	.....	661	.....	.....	.....
ward 3 .....	.....	721	.....	.....	.....
ward 4 .....	.....	701	.....	.....	.....
Sturgeon Bay town ¹	1,135	585	587	— 550	— 48.45
Union town	673	639	730	+ 34	+ 5.06
Washington town	738	863	812	+ 125	+ 16.95
Total	15,632	17,583	16,969	+ 1,901	+ 12.12
DOUGLAS COUNTY—					
Brule town	386	1,125	1,012	+ 739	+191.45
Gordon town	184	403	458	+ 219	+119.02
Nebagamain town	554	2,271	1,179	+ 1,717	+309.92
Superior city ²	11,983	31,091	26,168	+19,108	+159.45
ward 1	846	2,724	3,114	.....	.....
ward 2	1,453	2,043	1,785	.....	.....
ward 3	1,295	1,543	2,443	.....	.....
ward 4	4,486	6,859	2,153	.....	.....
ward 5	1,215	5,107	3,960	.....	.....

¹Part of Sturgeon Bay town annexed to Sturgeon Bay city since 1890. In 1890 Sturgeon Bay city had 2,195, Sturgeon Bay town 1,135, total 3,330; in 1900 Sturgeon Bay city had 3,372, Sturgeon Bay town 585, total 3,957; increase 627 or 18.8 per cent.

²Part of Superior town annexed to Superior city since 1890. In 1890 Superior city had 11,983, Superior town 361, total 12,344; in 1900 Superior city had 31,091, Superior town 1,446, total 32,536; increase 20,192 or 163.57 per cent.

POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV—Continued.

Counties, Towns, Cities, Villages.	United States Census.		State Census.	Increase + Decrease — in 1900, as compared with 1890	
	1890.	1900.	1895.	No.	Pr. ct.
DOUGLAS COUNTY—Continued.					
ward 6	893	2,488	1,675		
ward 7	1,686	4,621	3,713		
ward 8		1,495	1,701		
ward 9		3,150	2,624		
ward 10		1,061			
Superior town ²	361	1,445	1,169	+ 1,084	+300.28
Total	13,468	36,335	29,986	+22,866	+169.77
DUNN COUNTY—					
Colfax town	672	1,083	861	+ 411	+ 61.16
Dunn town	1,258	1,410	1,040	+ 152	+ 12.08
Eau Galle town	1,218	1,347	1,205	+ 129	+ 10.59
Elk Mound town	686	812	682	+ 117	+ 16.83
Grant town	542	667	641	+ 125	+ 23.06
Hay River town	486	501	499	+ 15	+ 3.09
Lucas town	705	885	858	+ 180	+ 25.53
Menomonie city	5,491	5,655	6,198	+ 164	+ 2.98
ward 1	1,417	1,314	1,358		
ward 2	1,176	1,148	1,493		
ward 3	1,013	1,187	1,112		
ward 4	1,885	2,006	2,235		
Menomonie town	1,633	1,849	1,859	+ 216	+ 13.22
New Haven town	521	620	493	+ 99	+ 19.00
Otter Creek town	342	337	300	+ 5	+ 1.46
Peru town	342	375	348	+ 33	+ 9.64
Red Cedar town	1,127	1,484	1,093	+ 357	+ 31.67
Rock Creek town	843	646	536	+ 197	+ 23.36
Sand Creek town	620	609	544	+ 11	+ 1.77
Sheridan town	423	589	543	+ 145	+ 34.51
Sherman town	635	780	725	+ 145	+ 22.83
Springbrook town	1,267	1,287	1,336	+ 20	+ 1.57
Stanton town	1,113	1,110	725	+ 3	+ .26
Tainter town	442	479	432	+ 37	+ 8.37
Tiffany town	1,118	1,219	705	+ 101	+ 9.03
Weston town	690	867	855	+ 177	+ 25.65
Wilson town	481	452	466	+ 29	+ 6.02
Total	22,664	25,043	25,006	+ 2,379	+ 10.49
EAU CLAIRE COUNTY—					
Altoona city	805	721	767	+ 84	+ 10.43
Augusta city	1,187	1,256	1,956	+ 69	+ 5.81
Bridge Creek town	1,122	1,280	1,155	+ 158	+ 14.08
Brunswick town	1,765	714	1,595	+ 51	+ 2.88
Clear Creek town	621	758	684	+ 127	+ 22.06
Drammen town	556	721	638	+ 165	+ 29.67
Eau Claire city	17,415	17,517	18,637	+ 102	+ .58
ward 1	3,078	1,581	3,391		
ward 2	1,604	1,595	1,776		
ward 3	1,975	1,869	2,180		
ward 4	1,035	988	1,040		
ward 5	1,538	1,422	1,627		
ward 6	3,893	1,938	4,213		
ward 7	2,128	2,019	2,236		
ward 8	2,164	2,103	2,224		
ward 9		2,156			
ward 10		1,846			

POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV—Continued.

Counties, Towns, Cities, Villages.	United States Census.		State Census.	Increase + Decrease — in 1900, as compared with 1890	
	1890.	1900.	1895.	No.	Pr. ct.
EAU CLAIRE COUNTY—Con.					
Fairchild town ¹	570	658	616	+ 112	+ 19.65
Fairchild village ²	645	947	781	+ 302	+ 46.82
Lincoln town	1,796	1,731	1,924	+ 55	+ 3.08
Ludington town	558	874	688	+ 316	+ 56.63
Otter Creek town	688	729	742	+ 41	+ 5.95
Pleasant Valley town	737	1,000	951	+ 263	+ 35.69
Seymour town	406	559	448	+ 153	+ 37.68
Union town	674	906	880	+ 231	+ 34.27
Washington town	1,138	1,322	1,310	+ 184	+ 16.16
Total	30,673	31,692	33,172	+ 1,019	+ 3.32
FLORENCE COUNTY—					
Commonwealth town ³	895	828	938	+ 67	+ 7.48
Florence town	1,709	1,824	1,551	+ 115	+ 6.72
Homestead town ⁴		545	361		
Total	2,604	3,197	2,850	+ 593	+ 22.77
FOND DU LAC COUNTY—					
Alto town	1,316	1,290	1,332	— 26	— 1.97
Ashford town	1,868	1,756	1,849	+ 113	+ 6.06
Auburn town	1,509	1,417	1,542	+ 92	+ 6.09
Brandon village ⁴	660	663	690	+ 3	+ .45
Byron town	1,216	1,234	1,344	+ 18	+ 1.48
Calumet town	1,399	1,443	1,513	+ 44	+ 3.14
Eden town	1,333	1,393	1,399	+ 60	+ 4.50
Eldorado town	1,458	1,363	1,467	+ 95	+ 6.51
Empire town	873	865	980	+ 8	+ .91
Fond du Lac city	12,024	15,110	13,061	+ 3,086	+ 25.66
ward 1	1,759	2,389	1,933		
ward 2	1,923	2,404	2,278		
ward 3	2,112	2,402	2,012		
ward 4	2,037	2,691	2,181		
ward 5	1,639	1,013	838		
ward 6		1,106	948		
ward 7	1,084	1,252	1,111		
ward 8	1,470	1,853	1,750		
Fond du Lac town	1,126	1,280	1,290	+ 154	+ 13.67
Forest town	1,311	1,206	1,236	+ 105	+ 8.00
Friendship town	856	852	777	— 4	— .46
Lamarline town	1,232	1,223	1,278	+ 9	+ .73
Marshfield town	1,938	1,992	2,131	+ 54	+ 2.78
Metomen town ⁴	1,193	1,194	1,234	+ 1	+ .83
Oakfield town	1,324	1,471	1,468	+ 147	+ 11.10
Osceola town	1,272	1,077	1,139	+ 195	+ 15.33
Ripon city	3,358	3,818	4,380	+ 460	+ 13.69
ward 1		934			
ward 2		930			
ward 3		916			
ward 4		1,038			

¹Fairchild village, formerly in Fairchild town, made independent since 1890.²Exclusive of population of Fairchild village. In 1890 Fairchild town had 570, Fairchild village 645, total 1,215; in 1900 Fairchild town had 658, Fairchild village 947, total 1,605; increase 390 or 32 per cent.³Homestead town organized from part of Commonwealth town since 1890. In 1900 Commonwealth town had 828, Homestead town 545; in 1890 Commonwealth town had 895; increase 478 or 53.4 per cent.⁴Brandon village, formerly in Metomen town, now independent.⁵Exclusive of population of Brandon village. In 1890 Brandon village had 660, Metomen town 1,193, total 1,853; in 1900 Brandon village had 663, Metomen town 1,194, total 1,857; increase 4 or .2 per cent.

POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV—Continued.

Counties, Towns, Cities, Villages.	United States Census.		State Census.	Increase + Decrease — in 1900, as compared with 1890	
	1890.	1900.	1895.	No.	Pr. ct.
FOND DU LAC COUNTY—Con.					
Ripon town	1,185	1,067	1,224	— 118	— 9.95
Rosendale town	1,089	1,106	1,184	+	+.63
Springvale town	1,092	1,189	1,181	+	97+ 8.88
Taycheedah town	1,269	1,293	1,382	+	24+ 1.89
Waupun city (north ward)	1,062	1,118	1,200	+	56+ 5.27
(For total see Dodge county.)					
Waupun town	1,115	1,170	1,200	+	55+ 4.93
Total	44,085	47,589	47,436	+ 3,501	+ 7.94
FOREST COUNTY—					
Cavour town ¹		690			
Crandon town ²	370	706		+	336+ 90.81
Total	1,012	1,396	1,288	+ 384	+ 37.94
GRANT COUNTY—					
Beetown town	1,257	1,207	1,130	— 50	— 3.97
Bloomington town ³	587	630	635	+	43+ 7.32
Bloomington village ⁴	587	611	562	+	24+ 4.09
Boscobel town, incl. Boscobel city	1,692	1,775	1,608	+	83+ 4.90
Boscobel city	1,570	1,637	1,479	+	67+ 4.27
ward 1		409			
ward 2		402			
ward 3		489			
ward 4		337			
Cassville town ⁵	569	643	629	+	74+ 13.00
Cassville village ⁶	886	979	931	+	93+ 10.48
Castle Rock town	681	693	704	+	12+ 1.76
Clifton town	1,074	1,065	1,044	— 19	— 1.76
Cuba City village ⁷		636	442		
Ellenboro town	814	828	823	+	14+ 1.72
Fennimore town ⁸	1,907	795	794	— 12	— 1.48
Fennimore village ⁹	616	1,035	876	+	419+ 68.01
Glen Haven town	883	819	852	— 64	— 7.24
Harrison town	1,020	992	1,010	— 28	— 2.74
Hazel Green town ¹⁰	1,123	1,160	1,005	+	37+ 3.20
Hazel Green village ¹¹	426	442	448	+	16+ 3.75
Hickory Grove town	798	686	690	— 112	— 14.03
Jamestown town	961	978	1,002	+	17+ 1.76

¹Gagen town and part of Pelican Lake town annexed to Onelida county since 1890.

²Includes population (642) of Gagen and Pelican Lake towns.

³Organized from parts of Crandon and Pelican Lake towns since 1890.

⁴Part taken to form part of Cavour town since 1890.

⁵Bloomington village, formerly in Bloomington town, now independent.

⁶Exclusive of population of Bloomington village. In 1890 Bloomington town had 587, Bloomington village 587, total 1,174; in 1900 Bloomington town had 630, Bloomington village 611, total 1,241; increase 67 or 5.7 per cent.

⁷Cassville village, formerly in Cassville town, now independent.

⁸Exclusive of population of Cassville village. In 1890 Cassville town had 569, Cassville village 886, total 1,455; in 1900 Cassville town had 643, Cassville village 979, total 1,622; increase 167 or 11.47 per cent.

⁹Cuba City village organized from part of Smelser town since 1890. In 1900 Cuba City village had 636, Smelser town 923, total 1,559; in 1890 Smelser town had 1,295; increase 264 or 20.38 per cent.

¹⁰Fennimore village, formerly in Fennimore town, now independent.

¹¹Exclusive of population of Fennimore village. In 1890 Fennimore town had 807, Fennimore village 616, total 1,423; in 1900 Fennimore town had 795, Fennimore village 1,035, total 1,830; increase 407 or 28.6 per cent.

¹²Hazel Green village, formerly in Hazel Green town, now independent.

¹³Exclusive of population of Hazel Green village. In 1890 Hazel Green town had 1,123, Hazel Green village 426, total 1,549; in 1900 Hazel Green town had 1,160, Hazel Green village 442, total 1,602; increase 53 or 3.4 per cent.

POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV—Continued.

Counties, Towns, Cities, Villages.	United States Census.		State Census.	Increase + Decrease — in 1900, as compared with 1890	
	1890.	1900.	1895.	No.	Pr. ct.
GRANT COUNTY—Continued.					
Lancaster town, incl. Lancaster city	3,289	4,062	.....	773	+ 23.50
Lancaster city	1,543	2,403	2,174	860	+ 55.73
Liberty town	881	870	902	11	+ 1.24
Lima town	1,040	1,051	1,082	11	+ 1.05
Little Grant town	568	566	629	102	+ 14.96
Marion town	573	566	533	—	— 1.22
Millville town	197	268	222	7	+ 36.04
Montfort village ¹	467	627	606	160	+ 34.26
Mt. Hope town	640	671	664	31	+ 4.84
Mt. Ida town	779	793	825	14	+ 1.79
Muscoda town ²	556	454	540	101	+ 18.19
Muscoda village ³	606	743	733	138	+ 22.81
Paris town	778	792	832	14	+ 1.80
Patch Grove town	690	660	662	30	+ 4.31
Platteville town, incl. Platteville city	3,687	4,219	4,253	532	+ 14.42
Platteville city	2,740	3,340	3,321	600	+ 21.90
Potosi town ⁴	2,110	1,568	1,607	542	+ 25.68
Potosi village ⁵ .....	.....	434	454	.....	.....
Smelser town ⁶	1,286	923	933	372	+ 28.72
Waterloo town	934	966	978	32	+ 3.42
Watertown	488	474	493	14	+ 2.87
Wingville town ¹	913	854	925	59	+ 6.46
Woodman town	495	438	442	57	+ 11.51
Wyalusing town	786	918	903	132	+ 16.78
Total	36,651	38,881	38,372	2,230	+ 6.08
GREEN COUNTY—					
Adams town	851	854	871	3	+ .35
Albany town ⁷	682	699	719	17	+ 2.49
Albany village ⁸	698	797	655	99	+ 14.18
Brodhead city ¹⁰	1,461	1,584	1,717	123	+ 8.41
ward 1 .....	.....	736	762	.....	.....
ward 2 .....	.....	848	955	.....	.....
Brooklyn town	1,205	1,188	1,218	27	+ 2.24
Browntown village ¹² .....	.....	246	328	.....	.....
Cadiz town ¹³	1,507	1,240	1,316	267	+ 17.71
Clarke town	1,319	1,226	1,351	93	+ 7.06
Decatur town ¹⁰ .....	.....	650	661	35	+ 5.10
Exeter town	915	917	918	2	+ .21

¹Montfort village, formerly in Wingville town, now independent.²Exclusive of population of Montfort village. In 1890 Montfort village had 467. Wingville town 913, total 1,380; in 1900 Montfort had 627, Wingville town 854, total 1,481; increase 101 or 7.3 per cent.³Muscoda village, formerly in Muscoda town, now independent.⁴Exclusive of population of Muscoda village. In 1890 Muscoda town had 555. Muscoda village 605, total 1,160; in 1900 Muscoda town had 454, Muscoda village 743, total 1,197; increase 37 or 3.2 per cent.⁵Potosi village, formerly in Potosi town, now independent.⁶Includes population of Potosi village, not separately returned in 1890. In 1900 Potosi town had 1,568. Potosi village 434, total 2,002; in 1890 Potosi town had 2,110; decrease 108 or 5.1 per cent.⁷Albany village, formerly in Albany town, now independent.⁸Exclusive of population of Albany village. In 1890 Albany town had 682. Albany village 698, total 1,380; in 1900 Albany town had 699, Albany village 797, total 1,496; increase 116 or 8.4 per cent.¹⁰Brodhead village, formerly in Decatur town, incorporated as a city and made independent since 1890.¹²Exclusive of population of Brodhead village. In 1890 Brodhead city had 1,461. Decatur town 685, total 2,146; in 1900 Brodhead city had 1,584. Decatur town 650, total 2,234; increase 88 or 4.1 per cent.¹³Browntown village organized from part of Cadiz town since 1890. In 1900 Browntown village had 246. Cadiz town 1,240, total 1,486; in 1890 Cadiz town had 1,507; a decrease of 21 or 1.39 per cent.

POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV—Continued.

Counties, Towns, Cities, Villages.	United States Census.		State Census.	Increase + Decrease — in 1900, as compared with 1890	
	1890	1900.	1895.	No.	Pr. ct.
GREEN COUNTY—Continued.					
Jefferson town	1,278	1,184	1,282	— 94	— 7.34
Jordan town	1,101	966	1,043	— 135	— 12.26
Monroe city	3,768	3,927	3,843	+ 159	+ 4.22
ward 1		930	846		
ward 2		836	858		
ward 3		1,069	1,104		
ward 4		1,032	1,036		
Monroe town	966	942	1,033	— 24	— 2.48
Monticello village ¹	407	559	522	+ 152	+ 37.34
Mt. Pleasant town ¹	841	761	842	— 80	— 9.51
New Glarus town	1,180	1,245	1,202	+ 65	+ 5.50
Spring Grove town	1,135	1,021	1,106	— 114	— 10.04
Sylvester town	906	909	964	+ 3	+ .33
Washington town	818	768	797	— 50	— 6.11
York town	1,009	1,036	1,034	+ 27	+ 2.67
Total	22,732	22,719	23,420	— 13	— .05
GREEN LAKE COUNTY—					
Berlin city (wards 1, 3, 4, and 5 and part of ward 2)	4,118	4,448	4,279	+ 390	+ 8.01
Total for Berlin city, in Green Lake and Waushara counties	4,149	4,489		+ 340	+ 8.19
ward 1		752	749		
ward 2		1,167	1,007		
ward 3		1,034	1,027		
ward 4		658	713		
ward 5		878	738		
Berlin town	767	801	843	+ 34	+ 4.43
Brooklyn town, incl. Dartford village	1,280	1,403	1,012	+ 123	+ 9.60
Dartford village	204	450	389	+ 246	+ 120.59
Green Lake town	1,343	1,288	1,377	— 55	— 4.09
Klingston town	816	770	805	— 46	— 5.63
Mackford town ¹	1,039	912	1,027	— 127	— 12.22
Manchester town	1,024	1,001	1,108	— 23	— 2.24
Markesan village ²	475	706	523	+ 231	+ 48.63
Marquette town	812	872	846	+ 60	+ 7.38
Princeton town ³	1,167	1,123	1,198	— 44	— 3.77
Princeton village ⁴	986	1,202	1,195	+ 216	+ 21.90
Ste. Marie town	751	626	739	— 125	— 16.64
Seneca town	575	645	634	+ 60	+ 10.25
Total	15,163	15,797	15,939	+ 634	+ 4.18
IOWA COUNTY—					
Arena town	1,479	1,363	1,483	— 116	— 7.84
Brigham town	1,341	1,435	1,384	+ 94	+ 7.00
Clyde town	610	628	618	+ 18	+ 2.95

¹Monticello village, formerly in Mt. Pleasant town, now independent.²Exclusive of population of Monticello village. In 1890 Monticello village had 407. Mt. Pleasant town 841, total 1,248; in 1900 Monticello village had 559, Mt. Pleasant town 761, total 1,320; increase 72 or 5.76 per cent.³Markesan village, formerly in Mackford town, now independent.⁴Exclusive of population of Markesan village. In 1890 Mackford town had 1,039. Markesan village 475, total 1,514; in 1900 Mackford town had 912, Markesan village 706, total 1,618; increase 104 or 6.86 per cent.⁵Princeton village, formerly in Princeton town, now independent.⁶Exclusive of population of Princeton village. In 1890 Princeton town had 1,167. Princeton village 986, total 2,153; in 1900 Princeton town had 1,123; Princeton village 1,202, total 2,325; an increase of 172 or 7.98 per cent.

POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV—Continued.

Counties, Towns, Cities, Villages.	United States Census.		State Census.	Increase + Decrease — in 1900, as compared with 1890	
	1890.	1900.	1895.	No.	Pr. ct.
IOWA COUNTY—Continued.					
Dodgeville city	1,722	1,865	2,031	+	143 + 8.30
ward 1		604	673		
ward 2		722	739		
ward 3		559	619		
Dodgeville town	1,577	1,540	1,651	—	37 — 2.34
Eden town	956	997	968	+	41 + 4.28
Highland town ¹	*1,577	1,642	1,589	+	66 + 4.12
Highland village ¹	751	913	741	+	162 + 21.57
Linden town ²	*1,399	1,263	1,397	—	46 — 3.23
Linden village ²	462	543	494	+	81 + 17.53
Mifflin town	1,466	1,564	1,557	—	99 — 6.75
Mineral Point city	2,694	2,991	3,136	+	297 + 11.02
ward 1		734	766		
ward 2		985	1,035		
ward 3		553	600		
ward 4		719	735		
Mineral Point town	1,271	1,131	1,246	—	140 — 11.01
Moscow town	1,145	1,142	1,254	—	3 — .26
Pulaski town, incl. Avoca vil.	1,239	1,368	1,346	+	129 + 10.41
Avoca village	278	406	353	+	128 + 46.04
Ridgeway town	990	1,126	1,070	+	136 + 13.73
Waldwick town	810	722	798	—	88 — 10.86
Wyoming town	629	791	685	+	162 + 25.72
Total	22,117	23,114	23,447	+	997 + 4.50
IRON COUNTY³—					
Montreal town		1,631			
Knight town		1,363	1,119		
Saxon town		688	658		
Vaughn town		2,934	3,561		
Total		6,616	5,338		
JACKSON COUNTY—					
Albion town ⁴	1,717	1,723	1,516	+	6 + .34
Alma town	1,060	1,192	1,158	+	132 + 12.45
Bear Bluff town ⁵		151	146		
Black River Falls city	2,261	1,938	2,068	—	323 — 14.28
ward 1		421	513		
ward 2		415	449		
ward 3		388	397		
ward 4		714	709		
Brockway town ⁶		812	646		
City Point town ⁷	329	323	177	—	6 — 1.82

¹Highland village, formerly in Highland town, now independent.²Exclusive of population of Highland village. In 1890 Highland town had 1,577, Highland village 751, total 2,328; in 1900 Highland town had 1,642, Highland village 913, total 2,555; increase 227 or 9.75 per cent.³Linden village, formerly in Linden town, now independent.⁴Exclusive of population of Linden village. In 1890 Linden town had 1,399, Linden village 462, total 1,861; in 1900 Linden town had 1,353, Linden village 543, total 1,896; increase 35 or 1.88 per cent.⁵Organized from parts of Ashland and Oneida counties in 1893.⁶Brockway town organized from part of Albion town since 1890. In 1890 Albion town had 1,717. In 1900 Albion town had 1,732, Brockway town 812, total 2,535; increase 818 or 47.6 per cent.⁷Bear Bluff town organized from part of City Point town (formerly Sullivan) since 1890. In 1900 Bear Bluff town had 151, City Point town 323, total 474; in 1890 City Point town had 329; increase 145 or 44.07 per cent.

POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV—Continued.

Counties, Towns, Cities, Villages.	United States Census.		State Census.	Increase + Decrease — in 1900, as compared with 1890	
	1890.	1900.	1895.	No.	Pr. ct.
JACKSON COUNTY—Continued.					
Cleveland town	691	898	772 +	207	+ 29.95
Curran town	706	706	697	9	.....
Franklin town	626	715	695 +	89	+ 12.60
Garden Valley town	703	785	714 +	82	+ 11.66
Garfield town	502	775	774 +	273	+ 54.38
Hixton town	696	899	879 +	203	+ 29.16
Irving town	909	878	891	31	— 3.41
Knapp town	1,005	342	411	633	— 65.97
Manchester town	590	696	660 +	136	+ 24.26
Melrose town	1,304	1,532	1,481 +	228	+ 17.48
Merrillan village	639	739	749	100	+ 15.64
Millstone town	399	408	404 +	9	+ 2.25
Northfield town	787	1,026	964 +	239	+ 30.36
Springfield town	903	928	925 +	25	+ 2.76
Total	15,797	17,466	16,722 +	1,669	+ 10.56
JEFFERSON COUNTY—					
Astalan town	1,349	1,818	1,286 —	36	— 2.66
Cold Spring town	649	606	621 —	43	— 6.62
Concord town	1,331	1,236	1,327	96	— 7.13
Farlington town	1,847	1,803	1,877 +	6	+ .32
Ft. Atkinson city ¹	2,283	3,043	2,815 +	780	+ 33.28
ward 1		793	744		.....
ward 2		708	724		.....
ward 3		659	600		.....
ward 4		883	747		.....
Hebron town	1,060	1,069	1,095 +	9	+ .84
Ixonia town	1,491	1,374	1,480 —	117	— 7.84
Jefferson city ²	2,287	2,584	2,702 +	297	+ 12.98
ward 1		727			.....
ward 2		633			.....
ward 3		680			.....
ward 4		544			.....
Jefferson town ³	1,766	1,729	1,897 —	37	— 2.09
Koshkonong town ⁴	1,499	1,475	1,576 —	24	— 1.60
Lake Mills town ⁵	1,054	1,331	1,312 +	277	+ 26.28
Lake Mills village ⁶	1,053	1,387	1,175 +	334	+ 31.71
Millford town	1,439	1,271	1,292 —	168	— 11.66
Oakland town	1,168	1,287	1,293 +	119	+ 10.18
Palmyra town ⁷	730	789	734 —	1	— .12
Palmyra village ⁸	567	716	690 +	149	+ 26.27
Sullivan town	1,323	1,299	1,391 +	84	+ 6.36
Sumner town	539	555	580 +	16	+ 2.96

¹Ft. Atkinson city, formerly in Koshkonong town, now independent.²Exclusive of population of Fort Atkinson city. In 1890 Ft. Atkinson city had 2,283. Koshkonong 1,499, total 3,782; in 1900 Ft. Atkinson city had 3,043, Koshkonong town 1,475, total 4,518; increase 736 or 19.46 per cent.³Jefferson city, formerly in Jefferson town, now independent.⁴Exclusive of population of Jefferson city. In 1890 Jefferson city had 2,287. Jefferson town 1,766, total 4,053; in 1900 Jefferson city had 2,584, Jefferson town 1,729, total 4,313; increase 260 or 6.4 per cent.⁵Lake Mills village, formerly in Lake Mills town, now independent.⁶Exclusive of population of Lake Mills village. In 1890 Lake Mills town had 1,054. Lake Mills village 1,053, total 2,107; in 1900 Lake Mills town had 1,331, Lake Mills village 1,387, total 2,718; increase 611 or 28.99 per cent.⁷Palmyra village, formerly in Palmyra town, now independent.⁸Exclusive of population of Palmyra village. In 1890 Palmyra town had 780. Palmyra village 567, total 1,357; in 1900 Palmyra town had 789, Palmyra village 716, total 1,505; increase 148 or 10.9 per cent.

POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV—Continued.

Counties, Towns, Cities, Villages.	United States Census.		State Census.	Increase + Decrease — in 1900, as compared with 1890	
	1890.	1900.	1895.	No.	Pr. ct.
JEFFERSON COUNTY—Con.					
Waterloo town ¹	976	965	981	— 11	— 1.12
Waterloo village ¹	862	1,137	1,122	+ 270	+ 31.90
Watertown city (wards 1, 2, 3, 4 and 7)	6,506	6,267	7,451	— 239	— 3.67
(For total, see Dodge Co.)					
Watertown town	1,691	1,563	1,621	— 128	— 7.56
Total	33,530	34,789	36,317	+ 1,259	+ 3.75
JUNEAU COUNTY—					
Armenia town ³	354	801	501	+ 447	+126.27
Camp Douglas village ⁴	225	432	360	+ 207	+ 92.00
Clearfield town	274	531	311	+ 257	+ 93.79
Cutler town ⁵		377			
Elroy city	1,413	1,685	1,560	+ 272	+ 19.25
ward 1		744			
ward 2		941			
Finley town ⁶		201			
Fountain town	744	556	835	+ 212	+ 28.49
Germantown town	510	609	525	+ 99	+ 19.41
Kildare town	648	929	706	+ 291	+ 44.90
Kingston town ⁷	211	296	226	+ 85	+ 40.28
Lemonweir town	1,075	1,174	1,044	+ 99	+ 9.20
Lindina town	957	1,036	1,037	+ 79	+ 8.25
Lisbon town	444	576	474	+ 132	+ 29.72
Lyndon town	495	572	487	+ 77	+ 15.55
Marion town	391	418	378	+ 27	+ 6.90
Mauston city	1,343	1,718	1,547	+ 375	+ 27.92
ward 1		685			
ward 2		1,033			
Necedah town, ⁸ incl. Necedah village	2,242	1,821	2,364	— 421	— 18.77
Necedah village	1,708	1,209	1,630	— 499	— 29.21
New Lisbon city	990	1,014	1,067	+ 24	+ 2.42
Orange town ⁹	469	561	508	+ 92	+ 19.61
Plymouth town	829	867	870	+ 38	+ 4.58
Seven Mile Creek town	697	812	772	+ 115	+ 16.49
Summit town	980	1,015	982	+ 35	+ 3.57
Wonewoc town	1,211	1,407	1,405	+ 196	+ 16.18
Wonewoc village	619	811	765	+ 192	+ 31.01
Total	17,121	20,629	18,754	+ 3,508	+ 20.48
KENOSHA COUNTY—					
Brighton town	926	850	878	— 76	— 8.20
Bristol town	1,071	1,151	1,143	+ 80	+ 7.46

¹Waterloo village, formerly in Waterloo town, now independent.²Exclusive of population of Waterloo village. In 1890, Waterloo town had 976, Waterloo village 862, total 1,838; in 1900 Waterloo town had 965, Waterloo village had 1,137, total 2,102; increase 264 or 14.36 per cent.³Finley town organized from parts of Armenia and Kingston towns since 1890. In 1890 Armenia town had 354, Kingston town 201, total 555; increase 733 or 129.7 per cent.⁴Camp Douglas village, formerly in Orange town, now independent.⁵Exclusive of population of Camp Douglas village. In 1890 Camp Douglas village had 225, Orange town 469, total 694; in 1900 Camp Douglas village had 432, Orange town 561, total 993; increase 299 or 43.08 per cent.⁶Cutler town organized from part of Necedah town since 1890. In 1900 Cutler town had 377, Necedah 1,821, Necedah village 1,209, total 3,407; in 1890 Necedah town had 2,242, Necedah village 1,708, total 3,950; decrease 543 or 13.74 per cent.

POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV—Continued.

Counties, Towns, Cities, Villages.	United States Census.		State Census.	Increase + Decrease in 1900, as compared with 1890	
	1890.	1900.	1895.	No.	Pr. ct.
KENOSHA COUNTY—Continued.					
Kenosha city	6,532	11,606	8,122	+ 5,074	+ 77.68
ward 1	1,229				
ward 2	1,261				
ward 3	2,225				
ward 4	2,069				
ward 5	1,263				
ward 6	1,128				
ward 7	1,102				
ward 8	1,339				
Paris town	871	818	883	— 53	— 6.08
Pleasant Prairie town	1,646	1,776	1,524	+ 130	+ 7.89
Randall town	658	784	643	+ 126	+ 19.14
Salem town	1,493	1,846	1,887	+ 353	+ 23.64
Somers town	1,632	2,044	1,819	+ 412	+ 25.24
Wheatland town	752	832	649	+ 80	+ 10.63
Total	15,581	21,707	17,584	+ 6,126	+ 39.31
Kewaunee County—					
Ahnapee town	1,384	1,196	1,329	— 188	— 13.58
Algoma city ¹	1,015	1,738	1,603	+ 723	+ 71.23
ward 1		533			
ward 2		1,033			
ward 3		172			
Carlton town	1,571	1,462	1,651	— 109	— 6.94
Casco town	1,211	1,334	1,360	+ 123	+ 10.15
Franklin town	1,622	1,482	1,552	— 141	— 8.68
Kewaunee city	1,216	1,773	1,528	+ 557	+ 45.80
Lincoln town	1,181	1,250	1,275	+ 69	+ 5.84
Naxenburg town	1,600	1,693	1,617	+ 93	+ 5.81
Montpeller town	1,469	1,547	1,542	+ 78	+ 5.31
Pierce town	859	748	901	— 104	— 12.20
Red River town	1,411	1,367	1,464	— 44	— 3.11
West Kewaunee town	1,620	1,622	1,809	+ 21	+ .12
Total	16,153	17,212	17,632	+ 1,069	+ 6.55
La Crosse County—					
Bangor town ²	499	659	778	+ 201	+ 3.13
Bangor village ³	499	633	630	+ 124	+ 26.85
Barre town	670	548	648	— 122	— 18.20
Burns town	1,090	1,078	1,092	— 5	— .46
Campbell town ⁴	955	1,078	1,132	+ 123	+ 12.88
Farmington town	1,810	1,890	1,903	+ 70	+ 3.87
Greenfield town	751	729	746	— 22	— 2.92
Hamilton town ⁵	1,400	1,427	1,455	+ 27	+ 1.92
Holland town	1,009	1,090	1,088	+ 81	+ 8.02

¹Formerly Ahnapee.²Bangor village, formerly in Bangor town, made independent since 1890.³Exclusive of population of Bangor village. In 1890 Bangor town had 639. Bangor village 499, total 1,138; in 1900 Bangor town had 659, Bangor village 633, total 1,292; increase 154 or 13.53 per cent.⁴Part of Campbell town annexed to La Crosse city since 1890. In 1890 Campbell town had 955, La Crosse city 25,090, total 26,045; in 1900 Campbell town 1,078, La Crosse city 28,895, total 29,973; increase 3,928 or 15.08 per cent.⁵Included West Salem village in 1890.⁶Exclusive of population of West Salem village. In 1890 Hamilton town had 1,400, West Salem village 542, total 1,942; in 1900 Hamilton town had 1,427, West Salem village 725, total 2,152; increase 210 or 10.8 per cent.

POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV—Continued.

Counties, Towns, Cities, Villages.	United States Census.		State Census.	Increase + Decrease — in 1900, as compared with 1890	
	1890.	1900.	1895.	No.	Pr. ct.
LA CROSSE COUNTY—Con.					
La Crosse city ^a	25,090	28,895	28,769	+ 3,805	+ 15.16
ward 1	1,571	1,586			
ward 2	1,325	1,446			
ward 3	1,603	1,580			
ward 4	1,456	1,331			
ward 5	1,262	1,355			
ward 6	1,247	1,224			
ward 7	1,435	1,209			
ward 8	2,813	2,506			
ward 9	1,542	1,583			
ward 10	1,597	1,692			
ward 11	1,363	1,664			
ward 12	937	1,102			
ward 13	1,114	1,137			
ward 14	1,613	1,307			
ward 15	1,446	1,510			
ward 16	824	644			
ward 17	1,829	1,922			
ward 18	1,888	2,042			
ward 19	1,192	1,220			
ward 20	956	1,009			
Onalaska city	1,587	1,368	1,634	— 219	— 13.79
Onalaska town	1,030	1,041	1,158	+ 11	+ 1.06
Shelby town	1,003	1,084	1,131	+ 8	+ 8.07
Washington town	796	764	823	+ 32	+ 4.02
West Salem village ^c	542	725	695	+ 183	+ 33.76
Total	38,801	42,997	43,610	+ 4,196	+ 10.81
LAFAYETTE COUNTY—					
Argyle town	1,268	1,419	1,356	+ 151	+ 11.90
Belmont town ¹	807	762	797	— 45	— 5.56
Belmont village ¹	378	509	477	+ 181	+ 24.65
Benton town ²	831	848	1,010	+ 18	+ 2.16
Benton village ³	414	546	448	+ 132	+ 31.88
Blanchard town ⁴	650	489	486	— 161	— 24.77
Blanchardville village ⁵		573	523		
Darlington town, incl. Darling-					
ton city	2,682	2,964	1,125	+ 282	+ 10.51
Darlington city	1,589	1,808	1,811	+ 219	+ 13.77
ward 1		887	975		
ward 2		921	826		
Elk Grove town	788	761	802	— 27	— 3.42
Fayette town	822	837	866	+ 15	+ 1.82
Gratiot town ⁶	1,511	1,217	1,245	— 294	— 19.45
Gratiot village ⁶		335	813		

^aFormerly in Hamilton town, now independent.¹Belmont village, formerly in Belmont town, now independent.²Exclusive of population of Belmont village. In 1890 Belmont town had 807, Belmont village 378, total 1,185; in 1900 Belmont town had 762, Belmont village 509, total 1,271; increase 86 or 7.25 per cent.³Benton village, formerly in Benton town, now independent.⁴Exclusive of population of Benton village. In 1890 Benton town had 831, Benton village 414, total 1,245; in 1900 Benton town had 848, Benton village 546, total 1,394; increase 149 or 11.96 per cent.⁵Blanchardville village organized from part of Blanchard town since 1890. In 1900 Blanchard town had 489, Blanchardville village 573, total 1,062; in 1890 Blanchard town had 650; increase 412 or 63.38 per cent.⁶Gratiot village organized from part of Gratiot town since 1890. In 1900 Gratiot town had 1,217, Gratiot village 335, total 1,552; in 1890 Gratiot town had 1,511; increase 41 or 2.7 per cent.

POPULATION OF WISCONSIN.

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POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV—Continued.

Counties, Towns, Cities, Villages.	United States Census.		State Census.	Increase + Decrease — in 1900, as compared with 1890	
	1890.	1900.	1895.	No.	Pr ct.
LAFAYETTE COUNTY—Con.					
Kendall town	754	685	705	— 69	— 9.15
Lamont town	516	567	566	+ 51	+ 9.88
Monticello town	305	313	311	+ 8	+ 2.62
New D gglings town	1,374	1,122	1,325	— 252	— 18.34
Seymour town	783	779	803	+ 4	+ .51
Shullsburg town, incl. Shulls-					
burg city	2,270	2,036	2,085	— 234	— 10.30
Shullsburg city	1,393	1,230	1,223	— 143	— 10.26
Wayne town	1,170	1,200	1,227	+ 30	+ 2.56
White Oak Springs town	384	337	433	+ 47	+ 12.24
Willow Springs town	921	982	989	+ 51	+ 5.47
Wiota town	1,627	1,678	1,716	+ 51	+ 3.13
Total	20,265	20,959	21,488	+ 694	+ 3.42
LANGLADE COUNTY—					
Ackley town	374	582	518	+ 208	+ 55.61
Antigo city	4,424	5,145	5,092	+ 721	+ 16.29
ward 1		532	532		
ward 2		757	690		
ward 3		784	749		
ward 4		1,107	1,232		
ward 5		810	770		
ward 6		1,155	1,029		
Antigo town	643	1,120	893	+ 477	+ 74.18
Elcho town	175	352	194	+ 177	+ 101.14
Elton town ¹	191	144	183	— 47	— 24.60
Evergreen town ¹		117			
Langlade town	153	173	169	+ 20	+ 13.07
Neva town ²	502	788	668	+ 286	+ 56.97
Norwood town	663	793	765	+ 130	+ 19.60
Peck town ³		248	206		
Polar town	444	760	509	+ 816	+ 71.17
Price town	233	671	203	+ 358	+ 145.06
Rolling town	685	1,040	912	+ 358	+ 51.28
Summit town ⁴	270	361	156	+ 91	+ 28.79
Upham town ⁵		198	570		
Vilas town ⁵	316	161	141	— 155	— 49.66
Total	9,465	12,553	11,092	+ 3,088	+ 32.62
LINCOLN COUNTY—					
Corning town	347	567	335	+ 220	+ 63.40
Harrison town	457	339	223	+ 118	+ 25.82
Merrill city	6,809	8,537	8,607	+ 1,728	+ 25.37
ward 1		981	953		
ward 2		679	709		
ward 3		1,038	1,085		
ward 4		1,817	1,751		
ward 5		925	1,058		
ward 6		1,538	1,461		
ward 7		1,559	1,590		

¹Evergreen town organized from part of Elton town since 1890. In 1900 Elton town had 144, Evergreen town 117, total 261; in 1890 Elton town had 191; increase 70 or 36.64 per cent.

²Part taken to form part of Upham town since 1890.

³Organized from parts of Neva and Summit towns since 1890.

⁴Part taken to form part of Upham town, and Parrish town annexed since 1890. In 1900 Neva town had 789, Upham town 198, Summit town 361, Parrish town 392, total 1,739; in 1890 Neva town had 502, Summit town 270, total 772; increase 967 or 125.25 per cent.

⁵Peck town organized from part of Vilas town since 1890. In 1900 Peck town had 248, Vilas 161, total 409; in 1890 Vilas had 316; increase 93 or 29.4 per cent.

⁶Includes population (392) of Parrish town, annexed to Summit town since 1890.

POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV—Continued.

Counties, Towns, Cities, Villages.	United States Census.		State Census.	Increase + Decrease — in 1900, as compared with 1890	
	1890.	1900.	1895.	No.	Pr. ct.
LINCOLN COUNTY—Continued.					
Merrill town	539	797	581	+ 258	+ 47.86
Pine River town	736	1,278	873	+ 542	+ 73.64
Rock Falls town ¹	732	414	691	+ 82	+ 24.69
Russell town	402	556	427	+ 154	+ 46.38
Scott town	570	870	732	+ 300	+ 52.63
Tomahawk city ²	1,816	2,291	2,296	+ 475	+ 26.15
Tomahawk town ³		620			
Total	12,008	16,269	14,765	+ 4,261	+ 35.48
MANITOWOC COUNTY—					
Cato town	1,793	1,743	1,792	— 50	— 2.78
Centerville town	1,374	1,443	1,419	+ 69	+ 5.02
Cooperstown town	1,629	1,500	1,623	+ 129	+ 7.91
Eaton town	1,332	1,317	1,402	— 15	— 1.12
Franklin town	1,836	1,781	1,871	+ 55	+ 2.99
Gibson town	1,651	1,498	1,669	+ 153	+ 9.26
Kiel village ⁴	497	924	789	+ 427	+ 85.91
Kossuth town	1,973	1,799	1,946	+ 174	+ 8.81
Liberty town	1,277	1,383	1,379	+ 106	+ 8.30
Manitowoc city ⁵	7,710	11,786	9,427	+ 4,076	+ 52.86
ward 1		2,050	1,768		
ward 2		1,438	1,158		
ward 3		2,504	2,045		
ward 4		1,976	1,566		
ward 5		1,302	1,001		
ward 6		686	478		
ward 7		1,870	1,411		
Manitowoc town ⁶	1,275	762	451	— 513	— 40.23
Manitowoc Rapids town	1,914	1,717	2,025	+ 197	+ 10.28
Maple Grove town	1,585	1,214	1,272	+ 37	+ 2.40
Meeme town	1,434	1,482	1,487	+ 48	+ 3.34
Mishicot town	1,417	1,578	1,538	+ 161	+ 11.36
Newton town	1,726	1,770	2,139	+ 44	+ 2.54
Rockland town, incl. Reedsville village	1,267	1,676	1,647	+ 409	+ 32.28
Reedsville village		428	536		
Schleswig town ⁷	1,566	1,385	1,485	+ 171	+ 10.98
Two Creeks town	607	632	651	+ 25	+ 4.11
Two Rivers city	2,870	3,784	3,693	+ 914	+ 31.84
ward 1		724			
ward 2		674			
ward 3		800			
ward 4		902			
ward 5		684			
Two Rivers town	1,108	1,087	1,241	+ 21	+ 1.89
Total	37,831	42,261	40,802	+ 4,430	+ 11.70

¹Included Tomahawk city in 1890; part taken to form Tomahawk town since 1890.

²Exclusive of population of Tomahawk city.

³Formerly in Rock Falls town, now independent.

⁴Organized from part of Rock Falls town since 1890. In 1900 Rock Falls town had 414, Tomahawk city 2,291, Tomahawk town 620, total 3,325; in 1890 Rock Falls town had 332, Tomahawk city 1,816, total 2,148; increase 1,177 or 54.79 per cent.

⁵Kiel village, formerly in Schleswig town, now independent.

⁶Exclusive of population of Kiel village. In 1890 Kiel village had 497, Schleswig town 1,556, total 2,053; in 1900 Kiel village had 924, Schleswig town 1,385, total 2,309; increase 256 or 12.46 per cent.

⁷Part of Manitowoc town annexed to Manitowoc city 1890. In 1890 Manitowoc city had 7,710, Manitowoc town 1,275, total 8,985; in 1900 Manitowoc city had 11,786, Manitowoc town 762, total 12,548; increase 3,563 or 39.65 per cent.

POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV—Continued.

Counties, Towns, Cities, Villages.	United States Census.		State Census.	Increase + Decrease — in 1900, as compared with 1890	
	1890.	1900.	1895.	No.	Per cent.
MARATHON COUNTY—					
Bergen town	177	552	334	+ 375	+211.87
Berlin town	1,083	1,078	1,192	5	— .46
Brighton town	686	599	578	— 87	— 12.68
Cassel town ¹ .....	.....	1,034	1,031	.....	.....
Cleveland town	252	1,060	527	+ 908	+320.63
Colby city (east ward) ² .....	.....	213	189	.....	.....
(For total see Clark Co.)					
Day town	816	821	833	+ 5	+ .61
Easton town ³	240	987	843	+ 747	+311.25
Eau Claire town	257	735	581	+ 478	+185.99
Edgar village ⁴ .....	.....	478	.....	.....	.....
Elderon town	232	568	367	+ 336	+144.82
Emmet town	439	786	623	+ 347	+ 79.04
Frankfort town	331	563	458	+ 237	+ 71.60
Halsey town	654	1,231	1,110	+ 577	+ 88.22
Hamburg town	893	891	720	— 198	— 28.57
Harrison town ⁵	926	211	201	— 715	— 77.21
Hewitt town ⁶ .....	.....	287	173	.....	.....
Holton town	760	1,022	911	+ 262	+ 34.47
Hull town ⁷	893	796	716	— 97	— 10.86
Johnson town	813	587	591	+ 274	+ 87.54
Knowlton town	333	435	277	+ 102	+ 30.63
Kronenwetter town	284	434	313	+ 170	+ 64.36
McMillan town ⁸	439	852	728	+ 413	+ 94.07
McMillan village ⁹ .....	.....	200	167	.....	.....
Maine town	1,178	1,119	1,077	— 59	— 5.00
Marathon town ¹	1,180	678	574	— 510	— 43.22
Marathon village	258	528	405	+ 270	+104.65
Mosinee town	199	371	186	+ 172	+ 86.43
Mosinee village	427	657	517	+ 230	+ 53.80
Morrise town ¹	353	770	558	+ 417	+118.13
Pike Lake town	542	1,022	792	+ 490	+ 88.56
Plover town ² .....	.....	302	288	.....	.....
Rib Falls town	674	771	667	+ 97	+ 14.37
Rietbrock town	717	1,016	887	+ 299	+ 41.70
Spencer town	1,018	841	736	— 177	— 17.38
Stettin town	962	1,110	1,083	+ 148	+ 15.38
Texas town ⁵	220	1,081	813	+ 861	+391.36
Wausau city	9,253	12,354	11,013	+ 3,101	+ 33.51
ward 1	1,574	.....	.....	.....	.....
ward 2	1,252	.....	.....	.....	.....

¹Cassel town organized from part of Marathon town since 1890. In 1900 Cassel town had 1,034, Marathon 678, total 1,712; in 1890 Marathon town had 1,180; increase 532 or 45.08 per cent.

²Colby city, "east ward," organized from part of Hull town since 1890. In 1900 Colby city, "east ward," had 213, Hull town 796, total 1,009; in 1890 Hull town had 833; increase 116 or 12.98 per cent.

³Plover town organized from parts of Easton and Norrie towns since 1890. In 1900 Easton town had 987, Norrie town 770, Plover town 302, total 2,059; in 1890 Easton town had 240, Norrie town 353, total 593; increase 1,466 or 247.2 per cent.

⁴Organized from part of Wein town since 1890. In 1900 Edgar village had 478, Wein town 995, total 1,443; in 1890 Wein town had 444; increase 999 or 225 per cent.

⁵Hewitt town organized from parts of Harrison and Texas towns since 1890. In 1900 Harrison town had 211, Hewitt town 287, Texas town 1,081, total 1,579; in 1890 Harrison town had 926, Texas town 220, total 1,146; increase 433 or 37.78 per cent.

⁶McMillan village organized from part of McMillan town since 1890. In 1900 McMillan town had 852, McMillan village 200, total 1,052; in 1890 McMillan town had 439; increase 613 or 139.6 per cent.

POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV—Continued.

Counties, Towns, Cities, Villages.	United States Census.		State Census.	Increase + Decrease — in 1900, as compared with 1890	
	1890.	1900.	1895.	No.	Pr. ct.
MARATHON COUNTY—Con.					
ward 3		1,149			
ward 4		1,045			
ward 5		1,527			
ward 6		1,362			
ward 7		1,421			
ward 8		1,515			
ward 9		1,509			
Wausau town	1,390	1,109	1,067	— 271	— 19.63
Wein town ¹	444	965	703	+ 521	+ 117.34
Weston town	1,776	2,137	1,719	+ 361	+ 20.32
Total	30,369	43,225	36,598	+ 12,837	+ 42.43
MARINETTE COUNTY—					
Amberg town ¹		1,375	939		
Coleman town ¹		2,545	2,135		
Crivitz town ¹		842			
Dunbar town ¹		1,138			
Grover town ¹		1,860	1,735		
Marinette city	11,523	16,195	15,286	+ 4,672	+ 40.54
ward 1	1,928	2,934	2,791		
ward 2	2,120	3,399	3,205		
ward 3	2,700	3,585	3,668		
ward 4	2,961	3,576	3,089		
ward 5	1,814	2,701	2,533		
Peshtigo town ¹	7,202	4,228	5,234	— 2,974	— 41.29
Porterfield town	460	956	762	+ 496	+ 10.78
Wausaukee town	1,119	1,685	1,189	+ 566	+ 50.58
Total	20,304	20,822	27,271	+ 10,519	+ 51.80
MARQUETTE COUNTY—					
Buffalo town	805	839	819	+ 34	+ 4.22
Crystal Lake town	667	577	624	— 90	— 13.49
Douglas town	628	684	645	+ 56	+ 8.91
Harris town	576	555	589	— 20	— 3.47
Mecan town	724	628	645	— 96	— 13.26
Montello town	1,177	1,325	1,308	+ 148	+ 12.57
Moundville town	324	562	446	+ 238	+ 73.45
Neshkoro town	561	638	635	+ 77	+ 13.72
Newton town	711	647	642	— 64	— 9.00
Oxford town	567	659	551	+ 92	+ 16.22
Packwaukee town	711	852	790	+ 141	+ 19.83
Shields town	608	698	662	+ 90	+ 14.80
Springfield town	605	644	678	+ 39	+ 6.44
Westfield town	1,012	1,200	1,169	+ 158	+ 15.57
Total	9,676	10,509	10,203	+ 833	+ 8.60

¹Part taken to form Edgar village since 1890.²Amberg, Coleman, Crivitz, Dunbar and Grover towns organized from parts of Peshtigo town since 1890. In 1900 Amberg town had 1,375, Coleman town 2,545, Crivitz town 842, Dunbar town 1,138, Grover town 1,860, Peshtigo town 4,228, total 11,986; in 1890 Peshtigo town had 7,202; increase 4,784 or 66.42 per cent.

POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV—Continued.

Counties, Towns, Cities, Villages.	United States Census.		State Census.	Increase + Decrease in 1900, as compared with 1890	
	1890.	1900.	1895.	No.	Pr. ct.
MILWAUKEE COUNTY—					
Cudahy village ¹		1,366	771	.....	.....
Franklin town	1,868	1,738	1,824	— 130	— 6.96
Granville town ²	2,272	2,267	2,674	— 5	— .22
Greenfield town	3,190	5,814	5,129	+ 2,624	+ 82.25
Lake town ³	4,899	5,302	4,598	+ 403	+ 8.22
Milwaukee city ⁴	204,468	285,315	249,290	+ 80,847	+ 39.54
ward 1		9,489	9,504	.....	.....
ward 2		9,909	9,853	.....	.....
ward 3		5,418	4,779	.....	.....
ward 4		10,679	9,773	.....	.....
ward 5		10,081	9,628	.....	.....
ward 6		13,671	13,459	.....	.....
ward 7		7,173	6,583	.....	.....
ward 8		17,328	16,618	.....	.....
ward 9		17,653	16,933	.....	.....
ward 10		17,024	16,052	.....	.....
ward 11		21,903	18,643	.....	.....
ward 12		18,216	11,524	.....	.....
ward 13		17,026	15,291	.....	.....
ward 14		20,661	17,145	.....	.....
ward 15		12,692	11,024	.....	.....
ward 16		9,654	7,731	.....	.....
ward 17		10,226	8,879	.....	.....
ward 18		13,907	11,122	.....	.....
ward 19		18,627	13,434	.....	.....
ward 20		16,863	12,998	.....	.....
ward 21		12,175	9,306	.....	.....
Milwaukee town ⁵	6,403	4,610	3,796	— 1,793	— 28.00
North Milwaukee village ⁶		1,049	.....	.....	.....
Oak Creek town ⁷	2,087	1,950	1,786	— 137	— 6.56
South Milwaukee city ⁸		3,392	2,662	.....	.....
ward 1		788	.....	.....	.....
ward 2		811	.....	.....	.....
ward 3		1,071	.....	.....	.....
ward 4		722	.....	.....	.....
Wauwatosa city ⁹		2,842	2,756	.....	.....
ward 1		841	.....	.....	.....
ward 2		621	.....	.....	.....
ward 3		643	.....	.....	.....
ward 4		737	.....	.....	.....

¹Cudahy village organized from part of Lake town since 1890. In 1900 Cudahy village had 1,366, Lake town 5,302; in 1890 Lake town had 4,899; increase 1,769 or 36.1 per cent.

²Part taken to form part of North Milwaukee village since 1890.

³Organized from parts of Granville and Wauwatosa towns since 1890.

⁴Parts taken to form Wauwatosa city and part of North Milwaukee village since 1890. An act by which part of this town was annexed to Milwaukee city, took effect Sept. 4, 1900; the population of this area is 3,598.

⁵Organized from part of Wauwatosa town since 1890. In 1900 Granville town had 2,267, North Milwaukee village 1,049, Wauwatosa town 13,360, Wauwatosa city 2,842, total 20,018; in 1890 Granville town had 2,272, Wauwatosa town 10,914, total 13,186; increase 6,832 or 51.81 per cent.

⁶Part of Milwaukee town annexed since 1890. An act by which part of Wauwatosa town was annexed took effect Sept. 4, 1900; the population of this area is 3,806.

⁷Part annexed to Milwaukee city and part taken to form Whitefish Bay village since 1890.

⁸Organized from part of Milwaukee town since 1890. In 1900 Milwaukee city had 285,135, Milwaukee town 4,610, Whitefish Bay village 512, total 290,437; in 1890 Milwaukee city had 204,468, Milwaukee town 6,403, total 210,871; increase 79,566 or 37.73 per cent.

⁹South Milwaukee city organized from part of Oak Creek town since 1890. In 1900 Oak Creek town had 1,950, South Milwaukee city 3,392, total 5,342; in 1890 Oak Creek town had 2,087; increase 3,255 or 155.96 per cent.

POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV—Continued.

Counties. Towns, Cities, Villages.	United States Census.		State Census.	Increase + Decrease — in 1900, as compared with 1890	
	1890.	1900.	1895.	No.	Pr. ct.
MILWAUKEE COUNTY—Con.					
Wauwatosa town ¹	10,914	13,860	12,173	+ 2,946	+ 26.99
Whitefish Bay village ²		512	464		
Total	236,101	330,017	287,922	+93,916	+ 39.78
MONROE COUNTY—					
Adrian town	615	631	657	+ 16	+ 2.60
Angelo town	477	710	570	+ 233	+ 48.84
Byron town ¹	458	825	680	+ 367	+ 80.13
Cashton village ²		510	356		
Clifton town	965	993	987	+ 38	+ 3.97
Glendale town ³	*1,020	1,051	1,106	+ 31	+ 3.03
Grant town ⁴		499			
Greenfield town	592	712	638	+ 120	+ 20.27
Jefferson town ⁵	1,315	1,223	1,175	— 92	— 6.99
Kendall village ⁶	304	460	383	+ 156	+ 51.31
Lafayette town	(¹)	438	337		
La Grange town	730	1,141	1,004	+ 411	+ 56.20
Leon town	688	779	779	+ 99	+ 14.38
Lincoln town ⁶	1,065	863	1,152	+ 202	+ 18.96
Little Falls town	993	1,222	1,300	+ 229	+ 23.06
New Lyme town	(¹)	206	170		
Norwalk village ⁷		257	318		
Oakdale town	680	682	323	+ 2	+ .29
Ontario village (part of) ⁸		91			
Total for Ontario village in Monroe and Vernon counties		389			
Portland town	1,166	1,194	1,204	+ 28	+ 2.40
Ridgeville town ¹	1,292	924	979	— 368	— 28.48
Scott town ¹		258			
Sheldon town ²	813	821	913	+ 8	+ .98
Sparta city	2,795	3,555	3,511	+ 760	+ 27.19
ward 1	928	975	1,060		
ward 2	662	817	850		
ward 3	694	970	905		
ward 4	511	793	696		
Sparta town	996	1,263	1,235	+ 267	+ 26.80
Tomah city	2,199	2,840	2,468	+ 641	+ 29.14
ward 1		871	650		
ward 2		1,063	845		
ward 3		906	963		

¹Scott town organized from part of Byron town since 1890. In 1900 Byron town had 825, Scott town 258, total 1,083; in 1890 Byron town had 458; increase 625 or 136.46 per cent.

²Cashton village organized from part of Jefferson town since 1890. In 1900 Cashton village had 510, Jefferson town 1,223, total 1,733; in 1890 Jefferson town had 1,315; increase 418 or 31.78 per cent.

³Kendall village, formerly in Glendale town, now independent.

⁴Exclusive of population of Kendall village. In 1890 Glendale town had 1,020, Kendall village 304, total 1,324; in 1900 Glendale town had 1,051, Kendall village 460, total 1,511; increase 187 or 14.12 per cent.

⁵Grant town organized from part of Lincoln town since 1890. In 1900 Grant town had 499, Lincoln town 863; total 1,362; in 1890 Lincoln town had 1,065; increase 297 or 27.88 per cent.

⁶Norwalk village organized from part of Ridgeville town since 1890. In 1900 Norwalk village had 257, Ridgeville town 924, total 1,281; in 1890 Ridgeville town had 1,292; decrease 11 or .85 per cent.

⁷Ontario village organized from part of Sheldon town since 1890. In 1900 Ontario village had 91, Sheldon town 821, total 912; in 1890 Sheldon town had 813; increase 99 or 12.17 per cent.

POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV—Continued.

Counties, Towns, Cities, Villages.	United States Census.		State Census.	Increase + Decrease — in 1900, as compared with 1890	
	1890.	1900.	1895.	No.	Pr. ct.
MONROE COUNTY—Continued.					
Tomah town	698	744	741	+	46 + 6.58
Wellington town	1,120	1,091	1,072	—	29 — 2.58
Wells town	642	717	659	+	75 + 11.68
Wilton town ²	1,088	895	903	—	191 — 17.58
Wilton village ²		400	340		
Total	(¹)23,211	28,103	26,350	+ 4,892	+ 21.07
OCONTO COUNTY—					
Armstrong town ³		482	151		
Brazeau town ⁴		437	257		
Chase town	913	1,474	1,072	+	561 + 61.44
Gillet town ⁵	938	1,249	898	+	311 + 33.15
How town ⁶	770	1,083	597	+	313 + 40.65
Lena town ⁷		894	567		
Little River town ⁸	1,194	1,042	1,041	—	152 — 12.72
Little Suamico town	624	944	746	+	320 + 51.28
Maple Valley town ⁷	1,736	870	765	—	466 — 34.87
Oconto city	5,219	5,646	6,017	+	427 + 8.18
east ward		1,492	1,667		
north ward		1,104	1,076		
south ward		2,080	2,166		
west ward		970	1,108		
Oconto town	1,068	1,042	1,241	—	26 — 2.43
Oconto Falls town	494	1,154		+	660 + 33.60
Pensaukee town	1,585	1,768	1,762	+	183 + 11.54
Spruce town ⁴		1,029	764		
Stiles town	868	897	835	+	29 + 3.24
Underhill town ⁸		631	549		
Menomonee Indian Reservation (part of)		232	220		
Total for Menomonee Indian Reservation in Oconto and Shawano counties		1,487			
Total	15,009	20,874	18,339	+ 5,865	+ 39.07
ONEIDA COUNTY¹²—					
Gagen town		554			
Hazelhurst town		1,052	1,352		
Newbold town		258			
Pelican town		568	850		

(¹)Lafayette and New Lyme towns (population 512) not separately returned in 1890.

²Wilton village organized from parts of Wilton town since 1890. In 1900 Wilton town had 895, Wilton village 400, total 1,295; in 1890 Wilton town had 1,066; increase 209 or 19.24 per cent.

³Organized from parts of How and Maple Valley towns since 1890.

⁴Organized from part of Maple Valley town since 1890.

⁵Part taken to form part of Underhill town since 1890.

⁶Part taken to form parts of Armstrong and Underhill towns since 1890.

⁷Parts taken to form Brazeau and Spruce towns and part of Armstrong town since 1890.

⁸Organized from parts of Gillet and How towns since 1890. In 1900 Armstrong town had 482, Brazeau town 437, Gillet town 1,249, How town 1,083, Maple Valley town 870, Spruce town 1,029, Underhill town 631, total 5,781; in 1890 Gillet town had 938, How town 770, Maple Valley town 1,336, total 3,044; increase 2,737 or 89.9 per cent.

⁹Lena town organized from part of Little River town since 1890. In 1900 Lena town had 894, Little River town 1,042, total 1,936; in 1890 Little River town had 1,194; increase 742 or 62.14 per cent.

¹⁰Parts taken to form Vilas and part of Iron counties in 1893, and part of Forest county annexed since 1890. Comparison with population for 1890 can not be made; information as to changes in minor civil divisions incomplete.

POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV—Continued.

Counties, Towns, Cities, Villages.	United States Cen. us.		State Census.	Increase + Decrease — in 1900, as compared with 1890	
	1890	1900.	1895.	No.	Pr. ct.
ONEIDA COUNTY—Continued.					
Rhinelander city	2,658	4,998	4,330	+ 2,340	+ 88.03
ward 1		881	925		
ward 2		786	744		
ward 3		770	861		
ward 4		733	683		
ward 5		1,034	628		
ward 6		794	484		
Schoepke town		299			
Sugar Camp town		485			
Woodboro town		661	528		
Total	5,010	8,875	7,060	+ 3,865	+ 77.14
OUTAGAMIE COUNTY—					
Appleton city	11,869	15,085	14,641	+ 3,216	+ 27.69
ward 1	2,208	2,846	2,611		
ward 2	2,757	2,692	2,974		
ward 3	2,436	3,130	3,139		
ward 4	1,267	1,628	1,511		
ward 5		2,588	2,384		
ward 6	3,221	2,201	2,022		
Black Creek town	1,577	1,482	1,454	+ 105	+ 7.62
Bovina town	663	1,034	787	+ 371	+ 55.95
Buchanan town	1,297	2,096	2,079	+ 699	+ 50.03
Center town	1,488	1,458	1,525	+ 30	+ 2.01
Cleero town	852	1,103	1,013	+ 151	+ 15.86
Dale town	1,207	1,273	1,265	+ 66	+ 5.46
Deer Creek town	932	1,308	1,175	+ 376	+ 40.34
Ellington town	1,210	1,188	1,251	+ 22	+ 1.81
Freedom town	1,602	1,664	1,656	+ 62	+ 3.87
Grand Chute town	1,574	1,722	1,713	+ 148	+ 9.40
Greenville town	1,246	1,342	1,335	+ 96	+ 7.70
Hortonville town ¹	867	654	738	+ 213	+ 24.56
Hortonville village ¹	440	913	864	+ 473	+ 107.50
Kaukauna city	4,667	5,115	5,451	+ 448	+ 9.59
ward 1		1,155	1,201		
ward 2		1,162	1,334		
ward 3		1,281	1,426		
ward 4		1,093	1,056		
ward 5		424	434		
Kaukauna town ²	4,134	1,479	1,514	+ 151	+ 9.71
Liberty town	492	599	528	+ 107	+ 21.74
Little Chute village ³	380	944	723	+ 564	+ 48.42
Maine town	478	616	588	+ 128	+ 28.87
Maple Creek town	815	800	824	+ 15	+ 1.84

¹Hortonville village, formerly in Hortonville town, made independent since 1890.²Exclusive of population of Hortonville village. In 1890 Hortonville town had 867, Hortonville village 440, total 1,307; in 1900 Hortonville town had 654, Hortonville village 913, total 1,567; increase 260 or 19.89 per cent.³Little Chute village, formerly in Kaukauna town, made independent since 1890.⁴Exclusive of population of Little Chute village. In 1890 Kaukauna town had 1,348, Little Chute village 380, total 1,728; in 1900 Kaukauna town had 1,479, Little Chute village 944, total 2,423; increase 695 or 40.21 per cent.

POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV—Continued.

Counties, Towns, Cities, Villages.	United States Census.		State Census.	Increase + Decrease — in 1900, as compared with 1890	
	1890.	1900.	1895.	No.	Pr. ct.
OUTAGAMIE COUNTY—Con.					
New London city (ward 3)....	368	540	522	+	172 + 46.73
Total for New London city in Outagamie & Waupaca Cos.	2,060	2,742	.....	+	682 + 33.75
ward 1	699	.....	.....	.....	.....
ward 2	556	.....	.....	.....	.....
ward 3	540	.....	.....	.....	.....
ward 4	647	.....	.....	.....	.....
ward 5	300	.....	.....	.....	.....
Osborn town	685	656	712	—	29 — 4.21
Seymour city	733	1,028	932	+	293 + 28.55
Seymour town	977	1,141	1,129	+	164 + 16.78
Oneda Indian Reservation (part of)	923	1,009	.....	+	86 + 9.31
(For total see Brown Co.)					
Total	38,690	46,247	44,404	+	7,557 + 19.53
OZAUKEE COUNTY—					
Belgium town	1,690	1,547	1,627	—	143 — 8.46
Cedarburg city ¹	1,361	1,626	1,952	+	285 + 19.47
Cedarburg town ¹	1,507	1,450	1,591	—	67 — 3.78
Fredonia town	1,666	1,662	1,721	—	14 — .84
Grafton town ²	1,010	1,060	1,567	+	50 + 4.95
Grafton village ³	434	478	.....	+	44 + 10.13
Mequon town	2,302	2,792	2,903	—	110 — 8.79
Port Washington city ⁴	1,659	3,010	2,661	+	1,351 + 81.43
Port Washington town ⁵	1,067	1,081	1,109	+	14 + 1.31
Saukville town	1,647	1,667	1,714	+	20 + 1.21
Total	14,943	16,363	16,545	+	1,420 + 9.50
PEPIN COUNTY—					
Albany town	459	650	568	+	191 + 41.61
Durand city	1,154	1,458	1,372	+	304 + 26.34
Durand town	253	267	250	+	14 + 5.53
Frankfort town	648	877	775	+	229 + 35.34
Lima town	765	743	748	—	22 — 2.87
Pepin town ⁶	1,122	1,142	1,194	+	20 + 1.78
Pepin village ⁷	369	407	376	+	38 + 10.29
Stockholm town	711	671	748	—	40 — 5.62
Waterville town	1,287	1,522	1,382	+	235 + 18.25
Waubeck town	164	169	160	+	4 + 2.43
Total	6,932	7,905	7,567	+	973 + 14.03

¹Cedarburg city, formerly in Cedarburg town, now independent.²Exclusive of population of Cedarburg city. In 1890 Cedarburg city had 1,361, Cedarburg town 1,507, total 2,868; in 1900 Cedarburg city had 1,626, Cedarburg town 1,450, total 3,076; increase 208 or 7.25 per cent.³Grafton village, formerly in Grafton town, now independent.⁴Exclusive of population of Grafton village. In 1890 Grafton town had 1,010, Grafton village 434, total 1,444; in 1900 Grafton town had 1,060, Grafton village 478, total 1,538; increase 94 or 6.50 per cent.⁵Port Washington city, formerly in Port Washington town, now independent.⁶Exclusive of population of Port Washington city. In 1890 Port Washington city had 1,659, Port Washington town 1,067, total 2,726; in 1900 Port Washington city had 3,010, Port Washington town 1,081, total 4,091; increase 1,365 or 50 per cent.⁷Pepin village, formerly in Pepin town, now independent.⁸Exclusive of population of Pepin village. In 1890 Pepin town had 1,122, Pepin village 369, total 1,491; in 1900 Pepin town had 1,142, Pepin village 407, total 1,549; increase 58 or 3.89 per cent.

POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV—Continued.

Counties, Towns, Cities, Villages.	United States Census		State Census.	Increase + Decrease — in 1900, as compared with 1890	
	1890.	1900.	1895.	No	Pr. ct.
PIERCE COUNTY—					
Clifton town	633	631	688	—	— .31
Diamond Bluff town	472	506	532	+ 34	+ 7.25
Ellsworth town	1,338	1,481	1,495	+ 143	+ 10.68
Ellsworth village	670	1,052	881	+ 382	+ 57.01
El Paso town	845	1,084	1,015	+ 229	+ 28.23
Gilman town	1,239	1,378	1,288	+ 129	+ 11.21
Hartland town	1,201	1,182	1,206	+ 19	+ 1.58
Isabelle town	330	447	373	+ 117	+ 35.45
Maiden Rock town	1,176	1,187	1,322	+ 11	+ .93
Maiden Rock village	343	304	312	+ 39	+ 11.37
Martell town	1,292	1,277	1,354	+ 15	+ 1.16
Oak Grove town	824	788	865	+ 36	+ 4.36
Prescott city	911	1,002	966	+ 91	+ 9.98
River Falls city (wards 2, 3 & 4)	1,602	1,850	1,765	+ 248	+ 15.48
Total for River Falls city, in Pierce & St. Croix counties	1,783	2,008	.....	+ 225	+ 12.61
ward 1	158	.....	151	.....	.....
ward 2	785	.....	807	.....	.....
ward 3	464	.....	449	.....	.....
ward 4	601	.....	512	.....	.....
River Falls town	1,073	1,254	1,242	+ 181	+ 16.86
Rock Elm town	1,047	1,270	1,141	+ 223	+ 21.29
Salem town	845	1,081	814	+ 136	+ 16.09
Spring Lake town ¹	998	1,200	1,623	+ 202	+ 20.24
Spring Valley village ¹ .....	.....	1,021	.....	.....	.....
Trenton town	951	965	1,048	+ 14	+ 1.47
Trimble town	1,594	1,505	1,681	+ 89	+ 5.58
Union town	1,001	1,478	1,328	+ 477	+ 47.65
Total	20,385	23,943	23,040	+ 3,558	+ 17.45
POLK COUNTY—					
Alsen town	1,261	1,440	1,474	+ 179	+ 14.95
Amery village ²	451	905	962	+ 454	+ 100.66
Apple River town	365	512	469	+ 147	+ 40.27
Balsam Lake town	431	757	571	+ 326	+ 75.63
Beaver town	333	506	439	+ 173	+ 51.93
Black Brook town	708	899	812	+ 191	+ 26.97
Bone Lake town	62	166	120	+ 104	+ 167.68
Clam Falls town	202	340	218	+ 137	+ 67.48
Clayton town	618	836	744	+ 218	+ 35.27
Clear Lake town ³	951	752	607	+ 199	+ 20.92
Clear Lake village ⁴ .....	.....	527	496	.....	.....
Eureka town	808	1,041	957	+ 233	+ 28.83
Farmington town	899	1,069	1,062	+ 160	+ 17.79
Garfield town	540	831	778	+ 291	+ 53.88
Georgetown town	85	211	181	+ 126	+ 14.82
Johnstown town	100	138	117	+ 38	+ 38.00
Laketown town	668	811	715	+ 147	+ 21.40
Lincoln town ⁵	621	1,010	806	+ 389	+ 62.64

¹Spring Valley village organized from part of Spring Lake town since 1890. In 1900 Spring Lake town had 1,200, Spring Valley village 1,021, total 2,221; in 1890 Spring Lake town had 998; increase 1,223 or 122.54 per cent.

²Amery village, formerly in Lincoln town, now independent.

³Exclusive of population of Amery village. In 1890 Amery village had 451, Lincoln town 621, total 1,072; in 1900 Amery village had 905, Lincoln town 1,010, total 1,915; increase 843 or 78.63 per cent.

⁴Clear Lake village organized from part of Clear Lake town since 1890. In 1900 Clear Lake town had 752, Clear Lake village 527, total 1,279; in 1890 Clear Lake town had 951; increase 328 or 34.49 per cent.

POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV—Continued.

Counties, Towns, Cities, Villages.	United States Census.		State Census	Increase + Decrease — in 1900, as compared with 1890	
	1890.	1900.	1895.	No.	Pr. ct.
POLK COUNTY—Continued.					
Loralne town ¹	210	267	258	+ 57	+ 27.14
Luck town	393	526	440	+ 133	+ 33.84
McKinley town ¹		110			
Milltown town	459	671	582	+ 212	+ 46.20
Osceola town ²	683	847	806	+ 164	+ 24.01
Osceola village ²	384	466	478	+ 82	+ 21.36
St. Croix Falls town ⁴	53	534	375	+ 481	+ 907.55
St. Croix Falls village ⁴	745	622	603	— 123	— 16.51
Sterling town	667	735	779	+ 68	+ 10.19
West Sweden town	270	282	314	+ 12	+ 4.44
Total	12,968	17,801	16,117	+ 4,833	+ 37.26
PORTAGE COUNTY—					
Alban town	563	878	792	+ 315	+ 55.95
Almond town	1,025	1,080	1,147	+ 45	+ 4.34
Amherst town ¹	1,324	1,425	2,030	+ 101	+ 7.62
Amherst village ¹	438	558		+ 120	+ 27.39
Belmont town	622	781	829	+ 159	+ 25.56
Buena Vista town	1,061	1,102	1,159	+ 41	+ 3.86
Carson town ¹	961	1,506	1,060	+ 544	+ 56.60
Dewey town ¹		754			
Eau Claire town ¹	748	1,086	780	+ 338	+ 45.18
Grant town	417	557	465	+ 140	+ 33.57
Hull town ¹	1,477	1,469	1,434	— 8	— .54
Lanark town	797	825	907	+ 28	+ 3.51
Linwood town ¹	368	677	446	+ 309	+ 83.96
New Hope town	885	962	1,002	+ 77	+ 8.70
Pine Grove town	399	565	501	+ 166	+ 4.16
Plover town	1,274	1,611	1,793	+ 337	+ 26.45
Sharon town	1,940	2,225	2,175	+ 285	+ 14.69
Stevens Point city	7,896	9,524	8,996	+ 1,028	+ 20.61
ward 1		1,448	1,362		
ward 2		1,699	1,544		
ward 3		1,600	1,482		
ward 4		2,313	2,258		
ward 5		1,623	1,467		
ward 6		841	882		
Stockton town	1,688	1,899	1,944	+ 201	+ 11.83
Total	24,798	29,483	28,531	+ 4,685	+ 18.88

McKinley town organized from part of Loralne town since 1890. In 1900 Loralne town had 267, McKinley town 110, total 377; in 1890 Loralne town had 210; increase 167 or 79.52 per cent.

²Osceola village, formerly in Osceola town, now independent.

³Exclusive of population of Osceola village. In 1890 Osceola town had 683, Osceola village 384, total 1,067; in 1900 Osceola town had 847, Osceola village 466, total 1,313; increase 246 or 23.05 per cent.

⁴St. Croix Falls village, formerly in St. Croix Falls town, now independent.

⁵Exclusive of population of St. Croix Falls village. In 1890 St. Croix Falls town had 53, St. Croix Falls village 745, total 798; in 1900 St. Croix Falls town had 534, St. Croix Falls village 622, total 1,156; increase 358 or 44.86 per cent.

⁶Includes population (895) of Stevens Point town; annexed to Carson, Eau Claire, Hull and Linwood towns since 1890.

⁷Amherst village, formerly in Amherst town, now independent.

⁸Exclusive of population of Amherst village. In 1890 Amherst town had 1,324, Amherst village 438, total 1,762; in 1900 Amherst town had 1,425, Amherst village 558, total 1,983; increase 221 or 12.54 per cent.

⁹Part of Stevens Point town annexed since 1890. In 1900 Carson town had 1,506, Linwood town 677, Stevens Point town 895, total 3,077; in 1890 Carson town had 961, Linwood town 368, total 1,329; increase 1,748 or 131.52 per cent.

¹⁰Organized from parts of Eau Claire and Hull towns since 1890.

¹¹Part taken to form part of Dewey town, and part of Stevens Point town annexed since 1890. In 1900 Dewey town had 754, Eau Claire town 1,086, Hull town 1,469, total 3,309; in 1890 Eau Claire town had 748, Hull town 1,477, total 2,225; increase 1,084 or 48.71 per cent.

POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV—Continued.

Counties, Towns, Cities, Villages.	United States Census.		State Census.	Increase + Decrease — in 1900, as compared with 1890	
	1890.	1900.	1895.	No.	Pr. ct.
PRICE COUNTY—					
Brannan town ¹	516	523	374 +	7	+ 1.35
Emery town	105	371	119 +	266	+ 253.33
Elfield town	857	373	494 +	484	+ 56.47
Georgetown town	157	249	149 +	92	+ 58.59
Hackett town	191	219	380 +	28	+ 14.66
Hill town ¹ .....	.....	242	234	.....	.....
Keennan town	96	520	215 +	424	+ 441.66
Knox town ¹ .....	.....	411	.....	.....	.....
Lake town	409	769	657 +	360	+ 88.01
Ogema town	775	972	1,017 +	197	+ 25.28
Phillips city ² .....	.....	1,820	1,652	.....	.....
ward 1 .....	.....	740	.....	.....	.....
ward 2 .....	.....	547	.....	.....	.....
ward 3 .....	.....	533	.....	.....	.....
Prentice town	570	519	979 —	51	— 8.94
Prentice village .....	.....	939	.....	.....	.....
Worcester town ³	1,682	1,179	707 —	403	— 25.47
Total	5,258	9,106	7,267	+ 3,848	+ 78.18
RACINE COUNTY—					
Burlington city ⁴	2,043	2,526	2,428 +	483	+ 23.64
Burlington town ⁴	1,097	1,052	1,069 —	46	— 4.10
Caledonia town	2,732	2,805	2,853 +	73	+ 2.67
Dover town	924	853	922 —	71	— 7.68
Mt. Pleasant town	2,192	2,911	2,277 +	719	+ 32.80
Norway town	841	913	963 +	72	+ 8.56
Racine city	21,014	29,102	24,889 +	8,088	+ 38.48
ward 1 .....	.....	1,155	1,103	.....	.....
ward 2 .....	.....	2,662	2,126	.....	.....
ward 3 .....	.....	3,786	3,568	.....	.....
ward 4 .....	.....	3,809	3,016	.....	.....
ward 5 .....	.....	6,704	5,695	.....	.....
ward 6 .....	.....	6,691	5,455	.....	.....
ward 7 .....	.....	4,295	3,426	.....	.....
Raymond town	1,784	1,601	1,723 —	183	— 10.25
Rochester town	699	750	780 +	51	+ 7.29
Union Grove village ⁵	432	520	472 +	88	+ 20.37
Waterford town	1,651	1,564	1,637 +	13	+ .83
Yorkville town ⁶	959	1,047	1,112 +	88	+ 9.17
Total	36,268	45,644	41,112	+ 9,376	+ 25.90
RICHLAND COUNTY—					
Akan town	982	916	993 —	66	— 6.72
Bloom town	1,361	1,261	1,365 —	100	— 7.34
Buena Vista town	797	1,104	820 +	507	+ 38.37
Dayton town	1,119	1,006	1,138 —	113	— 10.09
Eagle town	1,153	1,003	1,109 —	150	— 13.00

¹Hill and Knox towns organized from parts of Brannan town since 1890. In 1900 Brannan town had 523, Hill town 242, Knox town 411, total 1,176; in 1890 Brannan town had 516; increase 600 or 127.9 per cent.

²Phillips city organized from part of Worcester town since 1890. In 1900 Phillips city had 1,820, Worcester town 1,179, total 2,999; in 1890 Worcester town had 1,582; increase 1,417 or 89.57 per cent.

³Burlington village, formerly in Burlington town, incorporated as a city and made independent since 1890.

⁴Exclusive of population of Burlington village. In 1890 Burlington city had 2,043, Burlington town 1,097, total 3,140; in 1900 Burlington city had 2,526, Burlington town 1,052, total 3,578; increase 438 or 13.94 per cent.

⁵Union Grove village, formerly in Yorkville town, now independent.

⁶Exclusive of population of Union Grove village. In 1890 Union Grove village had 432, Yorkville town 959, total 1,391; in 1900 Union Grove village had 520, Yorkville town 1,047, total 1,567; increase 176 or 12.65 per cent.

POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV—Continued.

Counties, Towns, Cities, Villages.	United States Census.		State Census.	Increase + Decrease — in 1900, as compared with 1890	
	1890.	1900.	1895.	No.	Pr. ct.
RICHLAND COUNTY—Con.					
Forest town ¹	1,151	833	1,147	— 318	— 27.62
Henrietta town	1,143	1,140	1,207	3	.26
Ithaca town	1,193	916	1,319	277	23.21
Lone Rock village	342	512	393	170	49.70
Marshall town	909	912	886	3	.33
Orion town	665	962	688	297	44.66
Richland town	847	894	830	47	5.54
Richland Center city	1,819	2,321	2,044	502	27.59
ward 1	551	796	723		
ward 2	671	820	749		
ward 3	597	705	589		
Richwood town	1,843	1,299	1,358	— 44	— 3.27
Rockbridge town	1,148	991	1,161	157	13.67
Sylvan town	1,013	926	1,016	87	8.58
Viola village (part of) ¹		237			
Total for Viola village, in Richland & Vernon counties		432			
Westford town	1,124	1,163	1,111	39	3.46
Willow town	1,012	1,087	1,037	75	7.41
Total	19,121	19,483	19,619	362	1.89
ROCK COUNTY—					
Avon town	806	773	778	— 33	— 4.09
Beloit city	6,315	10,436	7,786	+ 4,121	+ 65.25
ward 1		1,700			
ward 2		2,689			
ward 3		1,737			
ward 4		2,336			
ward 5		1,964			
Beloit town	714	728	712	14	1.96
Bradford town	849	919	907	70	8.24
Center town	1,073	1,090	1,176	17	1.58
Clinton town	1,106	1,011	1,111	94	8.50
Clinton village	856	871	951	15	1.75
Edgerton city	1,695	2,192	1,972	597	37.43
ward 1		803			
ward 2		776			
ward 3		613			
Evansville city ²	1,523	1,864	1,716	341	22.38
ward 1		584			
ward 2		603			
ward 3		677			
Fulton town	1,363	1,417	1,419	54	3.96
Harmony town	1,083	1,112	1,184	29	2.67
Janesville city	10,836	13,185	12,971	2,249	21.67
ward 1	2,737	2,594	2,484		
ward 2	2,194	2,030	2,366		
ward 3	1,579	2,985	2,776		
ward 4	3,062	3,715	3,527		
ward 5	1,274	1,861	1,818		
Janesville town	926	1,132	1,193	206	22.24
Johnstown	1,034	932	1,027	102	9.87

¹Viola village organized from part of Forest town since 1890. In 1900 Forest town had 833. Viola village 237, total 1,070; in 1890 Forest town had 1,151; decrease 81 or 7 per cent.

²Incorporated as a city since 1890.

POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV—Continued.

Counties, Towns, Cities, Villages.	United States Census.		State Census.	Increase + Decrease — in 1900, as compared with 1890	
	1890.	1900.	1895.	No.	Pr ct.
ROCK COUNTY—Continued.					
La Prairie town	832	943	946	+	111 + 13.34
Lima town	1,109	1,030	1,064	—	79 — 7.12
Magnolia town	1,098	1,051	1,135	—	47 — 4.28
Milton town	2,300	2,552	2,459	+	252 + 10.95
Newark town	1,039	966	1,000	—	73 — 7.02
Plymouth town	1,188	1,349	1,254	+	161 + 13.55
Porter town	1,255	1,225	1,255	—	10 — .80
Rock town	976	958	975	—	18 — 1.84
Spring Valley town	1,422	1,446	1,413	+	24 + 1.68
Turtle town	993	1,076	1,067	+	83 + 8.35
Union town	950	945	924	—	5 — .52
Total	43,220	51,203	48,414	+	7,983 + 18.49
ST. CROIX COUNTY—					
Baldwin town	1,314	1,395	1,450	+	81 + 6.16
Baldwin village	482	631	621	+	149 + 30.91
Cady town	771	1,089	844	+	328 + 42.54
Cylon town	701	981	838	+	280 + 41.36
Eau Galle town	1,374	1,084	1,149	—	290 — 21.10
Emerald town	543	767	662	+	224 + 41.25
Erlin Prairie town	844	820	910	—	24 — 2.84
Forest town	190	440	170	+	250 + 131.57
Glenwood city ¹		1,789	2,008		
ward 1		425			
ward 2		485			
ward 3		417			
ward 4		462			
Glenwood town ¹	1,656	758	449	—	898 — 54.22
Hammond town	890	844	900	—	46 — 5.16
Hammond village	388	404	400	+	16 + 4.09
Hudson city	2,885	3,259	3,338	+	374 + 12.96
ward 1	518	634			
ward 2	1,176	1,251			
ward 3	1,216	1,374			
Hudson town	593	849	841	+	256 + 43.17
Kinnickinnic town	614	679	629	+	65 + 10.58
New Richmond city	1,408	1,631	1,680	+	223 + 15.83
ward 1	459	434			
ward 2	493	673			
ward 3	452	524			
Pleasant Valley town	529	426	471	—	103 — 19.47
Richmond town	826	720	850	—	106 — 12.83
River Falls city (ward 1)	181	158	151	—	23 — 12.70
(For total see Pierce Co.)					
Rush River town	650	582	633	—	68 — 10.61
St. Joseph town	774	1,024	948	+	250 + 32.29
Somerset town	1,148	1,451	1,287	+	303 + 26.39
Springfield town	1,431	1,419	1,319	—	12 — .83
Stanton town	758	780	785	+	22 + 2.90
Star Prairie town	761	1,280	968	+	519 + 68.20
Troy town	692	735	758	+	43 + 6.21
Warren town	736	815	811	+	79 + 10.73
Total	23,139	26,830	25,870	+	3,691 + 15.95

¹Glenwood city organized from part of Glenwood town since 1890. In 1900 Glenwood city had 1,789, Glenwood town 758, total 2,547; in 1890 Glenwood town had 1,656; increase 891 or 53.8 per cent.

POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV—Continued.

Counties, Towns, Cities, Villages.	United States Census.		State Census.	Increase + Decrease — in 1890, as compared with 1880	
	1890.	1900.	1895.	No.	Pr. ct.
SAUK COUNTY—					
Ableman village ¹	332	430	430	+ 98	+ 29.51
Baraboo city	4,606	5,751	5,484	+ 1,146	+ 24.88
ward 1	1,705	1,945	1,977		
ward 2	1,545	2,271	2,006		
ward 3	1,355	1,535	1,501		
Baraboo town	1,386	1,464	1,446	+ 78	+ 5.62
Bear Creek town	883	976	915	+ 93	+ 10.53
Delona town	594	626	619	+ 32	+ 5.38
Delton town	829	916	855	+ 87	+ 10.49
Excelsior town ¹	967	964	945	+ 13	+ 1.34
Fairfield town	672	697	730	+ 25	+ 3.72
Franklin town	1,044	1,114	1,075	+ 70	+ 6.70
Freedom town ²	943	962	1,036	+ 19	+ 2.01
Greenfield town	848	924	898	+ 76	+ 8.96
Honey Creek town	1,124	993	1,090	+ 131	+ 11.65
Ironton town	1,455	1,362	1,429	+ 93	+ 6.39
La Valle town	1,034	1,063	1,054	+ 29	+ 2.80
La Valle village	333	386	343	+ 53	+ 15.91
Merrimac town ³	847	615	895	+ 202	+ 23.84
Merrimac village ⁴		350			
North Freedom village ⁵	316	485	420	+ 169	+ 53.48
Prairie du Sac town	618	541	545	+ 77	+ 12.46
Prairie du Sac village	562	656	616	+ 94	+ 16.72
Reedsburg city	1,737	2,225	2,116	+ 488	+ 28.09
ward 1		1,027	1,095		
ward 2		1,198	1,021		
Reedsburg town	1,112	1,204	1,110	+ 92	+ 8.27
Sauk City village	876	810	837	+ 66	+ 7.53
Spring Green town ⁷	583	656	634	+ 73	+ 12.52
Spring Green village ⁷	625	621	777	+ 4	+ .64
Sumpter town	761	724	758	+ 37	+ 4.86
Troy town	911	950	998	+ 39	+ 4.28
Washington town	1,206	1,226	1,263	+ 20	+ 1.65
Westfield town	1,357	1,285	1,449	+ 72	+ 5.30
Winfield town	793	813	821	+ 20	+ 2.52
Woodland town	1,222	1,227	1,322	+ 5	+ .40
Total	30,575	33,006	32,919	+ 2,431	+ 7.96
SAWYER COUNTY—					
Hayward town		2,720	3,741		
Lac Court d'O Reilles Indian Reservation		873			
Total	1,977	3,593	3,741	+ 1,616	+ 81.74

¹Ableman village, formerly in Excelsior town, now independent.²Exclusive of population of Ableman village. In 1890 Ableman village had 332, Excelsior town 967, total 1,299; in 1900 Ableman village had 430, Excelsior town 954, total 1,384; increase 85 or 6.54 per cent.³Included North Freedom village in 1890.⁴Exclusive of population of North Freedom village.⁵Formerly in Freedom town, now independent. In 1890 Freedom town had 943, North Freedom village 316, total 1,259; in 1900 Freedom town had 962, North Freedom village 485, total 1,447; increase 188 or 14.93 per cent.⁶Merrimac village organized from part of Merrimac town since 1890. In 1900 Merrimac town had 615, Merrimac village 350, total 965; in 1890 Merrimac town had 847; increase 118 or 13.93 per cent.⁷Spring Green village, formerly in Spring Green town, now independent.⁸Exclusive of population of Spring Green village. In 1890 Spring Green town had 583, Spring Green village 625, total 1,208; in 1900 Spring Green town had 656, Spring Green village 621, total 1,277; increase 69 or 5.71 per cent.⁹Not returned by towns in 1890.

POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV—Continued.

Counties, Towns, Cities, Villages.	United States Census		State Census	Increase — Decrease — in 1900, as compared with 1890	
	1890.	1900.	1895.	No.	Pr. ct.
SHAWANO COUNTY—					
Almon town	463	700	561	+ 237	+ 51.18
Angellca town	680	1,260	1,062	+ 580	+ 85.29
Anlwa town	686	934	698	+ 248	+ 36.15
Belle Plaine town	1,028	997	1,016	— 31	— 3.01
Birnamwood town ¹	731	785	502	+ 54	+ 7.38
Birnamwood village ¹		475	370		
Fairbanks town ²	792	923	726	+ 131	+ 16.54
Germania town	131	308	157	+ 177	+ 135.11
Grant town	1,026	1,169	1,108	+ 143	+ 13.93
Green valley town	784	1,087	915	+ 253	+ 32.27
Hartland town	1,379	1,442	1,442	+ 63	+ 4.56
Herman town	853	1,111	986	+ 258	+ 30.24
Hutchins town	620	1,469	740	+ 849	+ 136.93
Lessor town	749	1,111	974	+ 362	+ 48.33
Maple Grove town	1,400	1,814	1,841	+ 414	+ 29.57
Morris town	400	689	490	+ 289	+ 7.22
Navarino town	243	413	282	+ 170	+ 69.95
Pella town	816	930	886	+ 114	+ 13.97
Richmond town	1,128	1,105	1,009	— 23	— 2.03
Seneca town	350	515	423	+ 165	+ 47.14
Shawano city	1,505	1,863	1,759	+ 358	+ 23.78
ward 1		800	720		
ward 2		500	496		
ward 3		563	541		
Tigerton village ²		723	490		
Washington town		1,322	1,420	+ 80	+ 6.44
Waukechon town	1,242	940	950	+ 94	+ 11.11
Wittenberg town ³	846	1,011	978	+ 353	+ 53.64
Wittenberg village ³	458	798	798	+ 72	+ 9.90
Menomonic Indian Reservation (part of)		1,255			
(For total see Oconto Co.)					
Stockbridge Indian Reservation		376			
Total	19,236	27,475	22,573	+ 8,239	+ 42.83
SHEBOYGAN COUNTY—					
Cedar Grove village ⁴		327			
Elkhart Lake village ⁵		464	392		
Greenbush town	1,690	1,689	1,758	— 1	— .05
Herman town	1,998	1,940	1,944	+ 58	+ 2.90
Holland town ⁶	2,874	2,551	2,846	+ 323	+ 11.23
Lima town	1,921	1,949	1,940	+ 28	+ 1.45
Lyndon town	1,697	1,732	1,741	+ 35	+ 2.06
Mitchell town	1,012	974	1,034	+ 38	+ 3.75
Mosel town	863	885	884	+ 22	+ 2.54

¹Birnamwood village organized from part of Birnamwood town since 1890. In 1900 Birnamwood town had 785; Birnamwood village 475, total 1,260; in 1890 Birnamwood town had 731; increase 529 or 72.36 per cent.

²Tigerton village organized from part of Fairbanks town since 1890. In 1900 Fairbanks town had 923, Tigerton village 723, total 1,646; in 1890 Fairbanks town had 792; increase 854 or 107.82 per cent.

³Wittenberg village, formerly in Wittenberg town, now independent.

⁴Exclusive of population of Wittenberg village. In 1890 Wittenberg town had 658, Wittenberg village 726, total 1,384; in 1900 Wittenberg town had 1,011, Wittenberg village 798, total 1,809; increase 425 or 30.7 per cent.

⁵Cedar Grove village organized from part of Holland town since 1890. In 1900 Cedar Grove village had 327, Holland town 2,551, total 2,878; in 1890 Holland town had 2,874; increase 4 or .13 per cent.

⁶Elkhart Lake village organized from part of Rhine town since 1890. Elkhart Lake village, in 1900, had 464, Rhine town 1,285, total 1,749; in 1890 Rhine town had 1,612; increase 137 or 8.49 per cent.

POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV--Continued.

Counties, Towns, Cities, Villages.	United States Census.		State Census.	Increase + Decrease — in 1900, as compared with 1890	
	1890	1900.	1895.	No.	Pr. ct.
SHEBOYGAN COUNTY—Con.					
Plymouth city	1,503	2,257	2,213	+ 754	+ 50.16
Plymouth town	1,356	1,398	1,386	+ 42	+ 3.09
Rhine town ¹	1,612	1,265	1,494	— 327	— 74.48
Russell town	439	437	443	— 2	— .45
Scott town	1,437	1,432	1,452	— 41	— 2.78
Sheboygan city	16,359	22,962	21,130	+ 6,603	+ 40.36
ward 1	2,285	3,124	3,013	.....	.....
ward 2	2,323	2,170	2,184	.....	.....
ward 3	1,474	1,404	1,324	.....	.....
ward 4 .....	.....	3,328	2,918	.....	.....
ward 5	3,739	3,184	2,801	.....	.....
ward 6 .....	.....	1,877	1,802	.....	.....
ward 7	3,064	3,178	2,681	.....	.....
ward 8	3,464	4,697	4,407	.....	.....
Sheboygan town	2,117	2,181	1,915	+ 64	+ 3.02
Sheboygan Falls town	1,677	1,690	1,664	+ 13	+ .78
Sheboygan Falls village	1,118	1,301	1,220	+ 183	+ 16.36
Sherman town	1,736	1,813	1,807	+ 77	+ 4.43
Wilson town	1,044	1,078	1,133	+ 34	+ 3.25
Total	42,469	50,345	48,396	+ 7,856	+ 18.48
TAYLOR COUNTY—					
Aurora town ² .....	.....	106	.....	.....	.....
Browning town	230	586	273	+ 356	+154.78
Chelsea town	613	787	584	+ 174	+ 28.38
Cleveland town ³ .....	.....	221	.....	.....	.....
Deer Creek town	573	775	683	+ 202	+ 35.25
Greenwood town	233	394	302	+ 161	+ 69.09
Grover town ⁴	296	333	602	+ 37	+ 12.50
Hammel town ⁵ .....	.....	389	.....	.....	.....
Holway town ⁶ .....	.....	308	199	.....	.....
Little Black town	1,131	1,331	1,268	+ 200	+ 17.68
Medford city	1,193	1,758	1,518	+ 566	+ 47.36
ward 1 .....	.....	710	611	.....	.....
ward 2 .....	.....	406	413	.....	.....
ward 3 .....	.....	642	494	.....	.....
Medford town	1,094	1,394	1,295	+ 300	+ 27.42
Molitor town ⁷	117	112	303	— 6	— 4.27
Rib Lake town	520	1,698	989	+ 1,178	+226.53
Westboro town	541	1,060	592	+ 519	+ 95.93
Total	16,731	11,262	8,498	+ 4,531	+ 67.31
TREMPEALEAU COUNTY—					
Albion town	847	1,126	952	+ 279	+ 32.93
Arcadia town ⁸	2,488	2,641	2,767	+ 153	+ 6.14
Arcadia village ⁹	659	1,273	1,012	+ 614	+ 93.17

¹Includes population of (190) Pine Creek town, taken to form Holway town and part of Aurora town since 1890.

²Organized from parts of Grover and Pine Creek towns since 1890.

³Parts taken to form Hammel town and part of Aurora town since 1890.

⁴Organized from part of Grover town since 1890.

⁵Organized from part of Pine Creek town since 1890. In 1900 Aurora town had 106, Grover town 323, Pine Creek town 190, Hammel town 389, Holway 308, total 1,326; in 1890 Grover town had 296; increase 1,030 or 347.97 per cent.

⁶Cleveland town organized from part of Molitor town since 1890. In 1900 Cleveland town had 221, Molitor town 112, total 343; in 1890 Molitor town had 117; increase 226 or 193.16 per cent.

⁷Arcadia village, formerly in Arcadia town, now independent.

⁸Exclusive of population of Arcadia village. In 1890 Arcadia town had 2,488, Arcadia village 659, total 3,147; in 1900 Arcadia town had 2,641, Arcadia village 1,273, total 3,914; increase 767 or 24.37 per cent.

POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV—Continued.

Counties, Towns, Cities, Villages.	United States Census.		State Census.	Increase + Decrease — in 1900, as compared with 1890	
	1890.	1900.	1895.	No.	Pr. et.
TREMPEALEAU COUNTY—Con.					
Blair village ¹		438	420	—	—
Burnside town ²	825	938	922	+ 113	+ 13.69
Caledonia town	379	345	389	— 34	— 8.97
Chimney Rock town	682	963	879	+ 281	+ 41.20
Dodge town	448	495	535	+ 47	+ 10.49
Ettrick town	1,841	1,989	1,916	+ 128	+ 6.95
Gale town ⁴	1,279	1,384	1,387	+ 105	+ 8.20
Galesville village ⁴	537	862	874	+ 325	+ 60.51
Hale town	1,566	1,773	1,740	+ 207	+ 13.21
Independence village ²	382	630	534	+ 248	+ 64.92
Lincoln town ⁶	633	786	725	+ 153	+ 24.10
Osseo village ⁵		472	275	—	—
Pigeon town	1,038	1,209	1,167	+ 171	+ 16.47
Preston town ¹	1,811	1,693	1,692	— 118	— 6.51
Summer town ⁴	854	767	727	— 87	— 10.18
Trempealeau town ⁶	1,584	1,152	1,056	— 432	— 27.27
Trempealeau village ⁶		609	682	—	—
Unity town	763	989	930	+ 226	+ 29.61
Whitehall village ⁶	304	600	402	+ 296	+ 97.36
Total	18,920	23,114	21,962	+ 4,194	+ 22.16
VERNON COUNTY—					
Birgen town	1,011	1,184	1,109	+ 173	+ 17.11
Christiana town ¹¹	1,521	1,264	1,236	— 257	— 16.89
Clynton town	1,045	1,214	1,127	+ 169	+ 16.17
Co. n town	1,188	1,324	1,228	+ 136	+ 11.44
De Soto village (part of) ¹²	276	300	430	+ 24	+ 8.69
(For total see Crawford Co.)					
Forest town	1,055	1,250	1,189	+ 195	+ 18.48
Franklin town	1,289	1,237	1,276	— 52	— 4.03
Genoa town	1,026	1,077	1,076	+ 51	+ 4.97
Greenwood town	1,126	1,027	1,108	— 93	— 8.30
Hamburg town	1,081	1,070	1,056	— 11	— 1.01
Harmony town	1,100	1,108	1,170	+ 8	+ .72
Hillsboro town ⁽¹⁾	(?) 1,178	1,182	1,195	+ 4	+ .33
Hillsboro village ⁽¹⁾	461	785	593	+ 224	+ 70.28

¹Blair village organized from part of Preston town since 1890. In 1900 Blair village had 438, Preston town 1,633, total 2,131; in 1890 Preston town had 1,811; increase 320 or 17.66 per cent.

²Independence village, formerly in Burnside town, now independent.

³Exclusive of population of Independence village. In 1890 Burnside town had 825, Independence 382, total 1,207; in 1900 Burnside had 938, Independence 630, total 1,568; increase 361 or 29.9 per cent.

⁴Galesville village, formerly in Gale town, now independent.

⁵Exclusive of population of Galesville village. In 1890 Gale town had 1,279, Galesville village 537, total 1,816; in 1900 Gale town had 1,384, Galesville village 862, total 2,246; increase 430 or 23.67 per cent.

⁶Whitehall village, formerly in Lincoln town, now independent.

⁷Exclusive of population of Whitehall village. In 1890 Lincoln town had 633, Whitehall village 304, total 937; in 1900 Lincoln town had 786, Whitehall village 600, total 1,386; increase 449 or 47.9 per cent.

⁸Osseo village organized from part of Sumner town since 1890. In 1900 Osseo village had 472, Sumner town 767, total 1,239; in 1890 Sumner town had 854; increase 385 or 45.08 per cent.

⁹Trempealeau village, formerly in Trempealeau town, now independent.

¹⁰Includes population of Trempealeau village, not separately returned in 1890. In 1900 Trempealeau town had 1,152, Trempealeau village 609, total 1,761; in 1890 Trempealeau town 1,584; increase 177 or 11.17 per cent.

¹¹Part taken to form Westby village since 1890.

¹²Organized from part of Christiana town since 1890. In 1900 Christiana town had 1,264, Westby village 524, total 1,788; in 1890 Christiana town had 1,521; increase 267 or 17.55 per cent.

¹³Formerly in Wheatland town, now independent.

¹⁴Included De Soto village in 1890.

¹⁵Exclusive of population of De Soto village. In 1890 De Soto village had 276, Wheatland town 603, total 879; in 1900 De Soto village had 300; Wheatland town 668, total 968; increase 89 or 10.12 per cent.

POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV—Continued.

Counties, Towns, Cities, Villages.	United States Census.		State Census.	Increase + Decrease — in 1900, as compared with 1890	
	1890.	1900.	1895.	No.	Pr. ct.
VERNON COUNTY—Continued.					
Jefferson town	1,400	1,548	1,529	+ 148	+ 10.57
Kickapoo town ²	1,185	874	1,000	— 311	— 26.24
La Farge village ³		488			
Liberty town ⁴	663	539	740	— 124	— 18.70
Ontario village (part of) ⁵		298	352		
(For total see Monroe Co.)					
Readstown village ⁶		403	175		
Stark town ⁷	1,033	907	1,117	— 126	— 12.19
Sterling town	1,152	1,187	1,186	+ 35	+ 3.03
Union town	819	849	826	+ 30	+ 3.66
Viola village (part of) ⁸		195	130		
(For total see Richland Co.)					
Viroqua city	1,270	1,950	1,630	+ 680	+ 53.54
ward 1		587	495		
ward 2		567	458		
ward 3		806	677		
Viroqua town	1,680	1,862	1,638	+ 182	+ 10.83
Webster town	1,092	1,123	1,117	+ 31	+ 2.83
Westby village ¹²		524	447		
Wheatland town ¹⁴	1,603	668	554	— 65	— 10.77
Whitestown town ¹⁵	863	914	791	+ 51	+ 5.90
Total	25,111	28,351	27,035	+ 3,240	+ 12.90
VILAS COUNTY¹¹—					
Arbor Vitae town		1,618	879		
Eagle River town		1,356	1,870		
Minocqua town, incl. Lac du Flambeau Indian Res.		1,955	1,052		
Lac du Flambeau Indian Res.		661			
Total		4,929	3,801		
WALWORTH COUNTY—					
Bloomfield town	1,197	1,314	1,281	+ 117	+ 9.77
Darien town	1,218	1,371	1,296	+ 153	+ 12.56
Delavan city ¹⁶	2,038	2,244	2,238	+ 206	+ 10.10
ward 1		719			
ward 2		772			
ward 3		753			
Delavan town ¹⁶	1,677	993	976	+ 316	+ 46.67

(⁹) Hillsboro village, formerly in Hillsboro town, now independent.

(¹⁰) Exclusive of population of Hillsboro village. In 1890 Hillsboro town had 1,178. Hillsboro village 461, total 1,639; in 1900 Hillsboro town had 1,182, Hillsboro village 755, total 1,937; increase 328 or 20 per cent.

¹¹Part taken to form Readstown village since 1890.

¹²Organized from part of Kickapoo town since 1890. In 1900 Kickapoo town had 874, Readstown village 403, total 1,277; in 1890 Kickapoo town had 1,185; increase 92 or 7.76 per cent.

¹³Organized from part of Stark town since 1890.

¹⁴Part taken to form La Farge village since 1890. In 1900 La Farge village had 488, Stark town 907, total 1,395; in 1890 Stark town had 1,033; increase 362 or 35.04 per cent.

¹⁵Part taken to form Viola village since 1890.

¹⁶Organized from part of Liberty town since 1890. In 1900 Liberty town had 539, Viola village 195, total 734; in 1890 Liberty town had 663; increase 71 or 10.7 per cent.

¹⁷Organized from part of Whitestown town since 1890.

¹⁸Part taken to form Ontario village since 1890. In 1900 Ontario village had 298, Whitestown town 914, total 1,212; in 1890 Whitestown town had 863; increase 349 or 40.44 per cent.

¹⁹Organized from part of Oneda county in 1893.

²⁰Delavan village, formerly in Delavan town, incorporated as a city and made independent since 1890.

²¹Exclusive of population of Delavan village. In 1890 Delavan city had 2,038, Delavan town 677, total 2,715; in 1900 Delavan city had 2,244, Delavan town 993, total 3,237; increase 522 or 19.22 per cent.

POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV—Continued.

Counties, Towns, Cities, Villages.	United States Census.		State Census.	Increase + Decrease — in 1900, as compared with 1890	
	1890.	1900.	1895.	No.	Pr. ct.
WALWORTH COUNTY—Con.					
East Troy town	1,406	1,513	1,482	+ 107	+ 7.61
Elkhorn city ¹	1,447	1,731	1,728	+ 284	+ 19.62
ward 1		499			
ward 2		550			
ward 3		682			
Geneva town	1,073	1,191	1,102	+ 118	+ 10.99
Lafayette town	933	924	958	— 9	— .96
La Grange town	844	882	910	+ 38	+ 4.50
Lake Geneva city	2,297	2,586	2,452	+ 288	+ 12.53
ward 1		885			
ward 2		663			
ward 3		1,037			
Linn town	854	1,082	1,021	+ 228	+ 26.69
Lyons town	1,328	1,298	1,390	— 30	— 2.25
Richmond town	799	770	822	— 29	— 3.63
Sharon town ²	1,160	1,127	1,122	— 33	— 2.84
Sharon village ³		878	906	+ 67	+ 7.63
Spring Prairie town	1,155	1,126	1,180	— 29	— 2.51
Sugar Creek town	1,004	931	1,023	— 73	— 7.27
Troy town	972	1,018	1,036	+ 46	+ 4.73
Walworth town	1,372	2,003	1,608	+ 631	+ 45.99
Whitewater city	4,359	3,406	3,799	— 954	— 21.88
ward 1		997			
ward 2		1,290			
ward 3		1,118			
Whitewater town	849	806	832	— 43	— 5.06
Total	27,860	29,259	29,162	+ 1,299	+ 5.00
WASHBURN COUNTY—					
Bashaw town ⁴	394	904	506	+ 510	+129.44
Long Lake town	118	238	161	+ 120	+101.69
Minong town ⁵		406	458		
Shell Lake town	1,535	1,823	1,743	+ 288	+ 18.76
Spooner town ⁶	734	1,576	1,204	+ 841	+114.57
Veazie town	145	576	194	+ 430	+296.76
Total	2,926	5,521	4,266	+ 2,189	+ 74.81
WASHINGTON COUNTY—					
Addison town	1,863	1,810	1,867	— 53	— 2.84
Barton town	1,169	1,280	1,282	+ 81	+ 7.78
Erlin town	1,801	1,200	1,254	— 101	— 7.76
Farmlington town	1,501	1,461	1,606	— 40	— 2.66
German town	2,026	1,937	2,067	— 89	— 4.39
Hartford city	1,296	1,632	1,607	+ 336	+ 25.92
ward 1		819			
ward 2		813			
Hartford town	1,339	1,354	1,440	+ 15	+ 1.12
Jackson town	1,680	1,760	1,763	+ 80	+ 4.76
Kewaskum town ⁶	1,015	851	936	— 164	— 16.15
Kewaskum village ⁷	557	679	674	+ 122	+ 21.90

¹Incorporated as a city since 1890.²Sharon village, formerly in Sharon town, now independent.³Exclusive of population of Sharon village. In 1890 Sharon town had 1,160. Sharon village 878, total 2,038; in 1900 Sharon town had 1,127, Sharon village 945, total 2,072; increase 34 or 1.66 per cent.⁴Minong town organized from parts of Bashaw and Spooner towns since 1890. In 1890 Bashaw town had 904, Minong town 406, Spooner town 1,575, total 2,885. In 1890 Bashaw town had 394, Spooner 734, total 1,128; increase 1,757 or 155.76 per cent.⁵Kewaskum village, formerly in Kewaskum town, now independent.⁶Exclusive of population of Kewaskum village. In 1890 Kewaskum town had 1,015, Kewaskum village 557, total 1,572; in 1900 Kewaskum town had 851, Kewaskum village 679, total 1,530; decrease 42 or 2.67 per cent.

POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV—Continued.

Counties, Towns, Cities, Villages.	United States Census.		State Census.	Increase + Decrease — in 1900, as compared with 1890	
	1890.	1900.	1895.	No.	Pr. ct.
WASHINGTON COUNTY—Con.					
Polk town ¹	1,639	1,554	1,614	— 85	— 5.18
Richfield town	1,584	1,617	1,625	+ 33	+ 2.08
Schleisingserville village ¹	432	549	501	+ 117	+ 27.08
Trenton town	1,760	1,572	1,770	— 188	— 10.68
Wayne town	1,471	1,391	1,489	— 80	— 5.43
West Bend city	1,296	2,119	1,766	+ 823	+ 63.50
ward 1		970			
ward 2		1,149			
West Bend town	822	843	826	+ 21	+ 2.56
Total	22,751	23,589	24,077	+ 838	+ 3.68
WAUKESHA COUNTY—					
Brookfield town	1,960	2,174	2,079	+ 214	+ 10.91
Delafeld town ²	1,303	1,250	1,446	— 53	— 4.06
Eagle town ³	1,020	744	798	— 276	— 27.06
Eagle village ³		324	322		
Genesee town	1,327	1,481	1,381	+ 154	+ 11.60
Hartland village ⁴	486	629	667	+ 143	+ 29.42
Lisbon town	1,443	1,510	1,575	+ 67	+ 4.64
Menomonie town ⁵	2,068	2,178	2,259	+ 120	+ 5.83
Menomonie Falls village ⁶	422	687	604	+ 265	+ 62.79
Merton town ⁷	1,499	1,530	1,587	+ 31	+ 2.07
Mukwanago town	1,217	1,263	1,361	+ 46	+ 3.77
Muskego town	1,390	1,349	1,432	— 41	— 2.95
New Berlin town	1,519	1,579	1,613	+ 60	+ 3.95
Oconomowoc city	2,729	2,880	3,178	+ 151	+ 5.53
ward 1		611			
ward 2		1,209			
ward 3		1,060			
Oconomowoc town	1,373	1,330	1,333	— 43	— 3.13
Ottawa town	880	883	863	+ 3	+ .34
Pewaukee town ⁸	2,077	1,708	2,608	+ 369	+ 17.75
Pewaukee village ⁹	680	714	780	+ 34	+ 5.00
Summit town	1,130	1,275	1,539	+ 145	+ 12.83
Vernon town	1,277	1,307	1,350	+ 30	+ 2.34
Waukesha city ¹⁰	6,321	7,419	7,222	+ 1,098	+ 17.37
ward 1		1,405			
ward 2		1,545			
ward 3		832			
ward 4		1,450			
ward 5		874			
ward 6		1,263			
Waukesha town ¹⁰	1,159	1,015	1,175	— 144	— 12.42
Total	33,270	35,229	36,562	+ 1,959	+ 5.88

¹Schleisingserville village, formerly in Polk town, now independent.²Exclusive of population of Schleisingserville village. In 1890 Polk town had 1,639, Schleisingserville village 432, total 2,071; in 1900 Polk town had 1,554, Schleisingserville village 549, total 2,103; increase 32 or 1.54 per cent.³Hartland village, formerly in Delafeld and Merton towns, now independent.⁴Exclusive of population of Hartland village. In 1890 Delafeld town had 1,303, Hartland village 486, Merton town 1,499, total 3,288; in 1900 Delafeld town had 1,250, Hartland village 629, Merton town 1,530, total 3,409; increase 121 or 3.68 per cent.⁵Eagle village organized from part of Eagle town since 1890. In 1900 Eagle town had 744, Eagle village 324, total 1,068; in 1890 Eagle town had 1,020; increase 48 or 4.7 per cent.⁶Menomonie Falls village, formerly in Menomonie town, now independent.⁷Exclusive of population of Menomonie Falls village. In 1890 Menomonie town had 2,068, Menomonie Falls village 422, total 2,490; in 1900 Menomonie town had 2,178, Menomonie Falls village 687, total 2,865; increase 385 or 15.52 per cent.⁸Pewaukee village, formerly in Pewaukee town, now independent.⁹Exclusive of population of Pewaukee village. In 1890 Pewaukee town had 2,077, Pewaukee village 680, total 2,757; in 1900 Pewaukee town had 1,708, Pewaukee village 714, total 2,422; decrease 335 or 12.15 per cent.¹⁰Waukesha village, formerly in Waukesha town, incorporated as a city and made independent since 1890.¹¹Exclusive of population of Waukesha village. In 1890 Waukesha city had 6,321, Waukesha town 1,159, total 7,480; 1900 Waukesha city had 7,419, Waukesha town 1,015, total 8,434; increase 954 or 12.75 per cent.

POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV—Continued.

Counties, Towns, Cities, Villages.	United States Census.		State Census.	Increase + Decrease — in 1900, as compared with 1890		
	1890.	1900.	1895.	No.	Pr. ct.	
WAUPACA COUNTY—						
Bear Creek town	1,136	1,257	1,194	+	121	+ 10.65
Caledonia town	943	904	991	—	39	— 4.13
Clintonville city	1,466	1,653	1,521	+	187	+ 12.75
Dayton town	852	891	986	—	39	— 4.57
Dupont town ¹	916	1,013	1,602	+	97	+ 10.59
Embarrass village ² .....	.....	270	.....	.....	.....	.....
Farmington town	1,087	1,522	1,391	+	435	+ 40.01
Fremont town ³	530	425	488	—	105	— 19.80
Fremont village ⁴	275	263	283	—	12	— 4.34
Harrison town ⁵ .....	.....	453	343	.....	.....	.....
Helvetia town ⁶	511	518	508	+	7	+ 1.36
Iola town ⁷	1,315	804	780	—	511	— 38.85
Iola village ⁸ .....	.....	558	476	.....	.....	.....
Larrabee town	1,436	1,398	1,452	—	38	— 2.64
Lebanon town	932	939	1,050	+	7	+ 7.75
Lind town	1,016	1,096	1,134	+	80	+ 7.87
Little Wolf town ⁹	1,137	1,421	1,884	+	284	+ 24.97
Manawa village ¹⁰	350	744	123	+	394	+ 112.57
Marion village ¹¹	470	602	.....	.....	132	+ 28.68
Matteson town ¹²	860	867	1,031	+	7	+ 8.1
Mukwa town	1,040	956	1,015	—	84	— 8.07
New London city (wards 1, 2, 4, & 5)	1,682	2,202	1,394	+	520	+ 30.91
(For total see Outagamie Co.)	.....	.....	.....	.....	.....	.....
Royalton town	1,198	1,272	1,263	+	74	+ 6.18
St. Lawrence town	1,004	1,178	1,146	+	174	+ 17.33
Scandinavia town ¹³	1,142	921	929	—	221	— 19.34
Scandinavia village ¹⁴ .....	.....	320	335	.....	.....	.....
Union town	1,153	1,309	1,345	+	156	+ 13.53
Waupaca city	2,127	2,912	2,823	+	785	+ 36.90
ward 1 .....	.....	785	754	.....	.....	.....
ward 2 .....	.....	775	717	.....	.....	.....
ward 3 .....	.....	742	731	.....	.....	.....
ward 4 .....	.....	610	621	.....	.....	.....
Waupaca town	964	960	1,003	—	4	— 4.1
Weyauwega town ¹⁵	1,546	578	593	+	33	+ 6.04
Weyauwega village ¹⁶	706	911	850	+	205	+ 29.03
Wyoming town ¹⁷ .....	.....	497	282	.....	.....	.....
Total	26,794	31,615	30,215	+	4,821	+ 17.99

¹Marion village, formerly in DuPont town, now independent.

Exclusive of population of Marion village. In 1890 DuPont town had 916, Marion village 470, total 1,386; in 1900 DuPont town had 1,013, Marion village 602, total 1,615; increase 229 or 16.52 per cent.

²Embarrass village organized from part of Matteson town since 1890. In 1900 Embarrass village had 270, Matteson town 867, total 1,137; in 1890 Matteson town had 860; increase 277 or 32.2 per cent.³Fremont village, formerly in Fremont town, now independent.

Exclusive of population of Fremont village. In 1890 Fremont town had 530, Fremont village 275, total 805; in 1900 Fremont town had 425, Fremont village 263, total 688; decrease 117 or 14.53 per cent.

⁴Harrison town and Iola village organized from parts of Iola town since 1890. In 1900 Harrison town had 453, Iola village 558, Iola town 804, total 1,815; in 1890 Iola town had 1,315; increase 500 or 38 per cent.⁵Part taken to form Wyoming town since 1890.⁶Organized from part of Helvetia town since 1890. In 1900 Helvetia town had 518, Wyoming town 497, total 1,015; in 1890 Helvetia town had 511; increase 504, or 98.63 per cent.⁷Manawa village, formerly in Little Wolf town, now independent.

Exclusive of population of Manawa village. In 1890 Little Wolf town had 1,137, Manawa village 350, total 1,487; in 1900 Little Wolf town had 1,421, Manawa village 744, total 2,165; increase 678 or 45.59 per cent.

⁸Part taken to form Scandinavia village since 1890.⁹Organized from part of Scandinavia town since 1890. In 1900 Scandinavia town had 921, Scandinavia village 320, total 1,241; in 1890 Scandinavia town had 1,142; increase 99 or 8.66 per cent.¹⁰Weyauwega village, formerly in Weyauwega town, now independent.

Exclusive of population of Weyauwega village. In 1890 Weyauwega town had 546, Weyauwega village 706, total 1,252; in 1900 Weyauwega town 578, Weyauwega village 911, total 1,490; increase 238 or 19 per cent.

POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV—Continued.

Counties, Towns, Cities, Villages.	United States Census.		State Census.	Increase + Decrease — in 1900, as compared with 1890	
	1890.	1900.	1895.	No.	Pr. ct.
WAUSHARA COUNTY—					
Aurora town	934	1,025	1,022	+ 91	+ 9.74
Berlin city (part of ward 2).....	31	41	36	+ 10	+ 32.25
(For total see Green Lake Co.)					
Bloomfield town	1,278	1,256	1,326	— 22	— 1.75
Coloma town	723	827	712	+ 104	+ 14.38
Dakota town	573	543	566	— 30	— 5.23
Deerfield town	453	556	568	+ 203	+ 44.81
Hancock town	660	1,163	925	+ 503	+ 76.21
Leon town	731	826	848	+ 96	+ 12.99
Marion town	623	654	660	+ 31	+ 4.97
Mt. Morris town	668	658	673	— 10	— 1.49
Oasis town	707	826	815	+ 119	+ 16.83
Plainfield town	799	921	904	+ 122	+ 15.27
Plainfield village	459	728	589	+ 269	+ 58.60
Poysippi town	912	1,046	1,067	+ 134	+ 14.69
Richford town	573	591	608	+ 18	+ 3.14
Rose town	577	823	764	+ 24	+ 42.63
Saxeville town	765	827	786	+ 62	+ 8.10
Springwater town	541	653	662	+ 112	+ 14.60
Warren town	796	848	817	+ 52	+ 6.53
Wautoma town	704	1,060	888	+ 356	+ 50.56
Total	13,507	15,972	15,355	+ 2,465	+ 18.24
WINNEBAGO COUNTY—					
Algoma town	757	840	821	+ 83	+ 10.96
Black Wolf town	837	778	763	— 58	— 6.92
Clayton town	1,170	1,161	1,242	— 9	— .76
Menasha city	4,581	5,589	6,154	+ 1,008	+ 22.00
ward 1		1,574	1,755		
ward 2		1,392	1,607		
ward 3		905	1,101		
ward 4		1,718	1,691		
Menasha town	595	646	680	+ 51	+ 8.57
Neenah city	5,083	5,954	5,781	+ 871	+ 17.13
ward 1		1,870	1,851		
ward 2		1,451	1,487		
ward 3		2,099	1,893		
ward 4		534	554		
Neenah town	538	533	574	— 5	— .92
Nekimi town	1,028	990	1,070	+ 38	+ 3.69
Nepesenum town	908	979	950	+ 31	+ 3.41
Omro town ¹	1,038	1,163	1,227	+ 125	+ 12.04
Omro village ²	1,232	1,358	1,395	+ 126	+ 10.22
Oshkosh city	22,836	28,284	26,947	+ 5,448	+ 23.85
ward 1		1,503	1,512		
ward 2		2,179	1,964		
ward 3		1,648	1,519		
ward 4		2,264	2,427		
ward 5		2,749	2,583		
ward 6		2,566	2,366		
ward 7		1,613	2,726		
ward 8		2,008	2,247		
ward 9		2,164	2,156		
ward 10		2,660	2,359		
ward 11		1,666	1,457		
ward 12		1,863	1,575		
ward 13		3,401	3,066		

¹Omro village, formerly in Omro town, now independent.²Exclusive of population of Omro village. In 1890 Omro town had 1,038, Omro village 1,232, total 2,270; in 1900 Omro town had 1,163, Omro village 1,358, total 2,521; increase 251 or 11 per cent.

POPULATION OF WISCONSIN, 1890, 1900, 1895.

Table IV—Continued.

Counties, Towns, Cities, Villages.	United States Census.		State Census.	Increase + Decrease — in 1900, as compared with 1890	
	1890.	1900.	1895.	No.	Pr. ct.
WINNEBAGO COUNTY—Con.					
Oshkosh town	1,489	1,812	1,522	+	323 + 21.69
Poygan town	747	742	851	—	5 — .65
Rushford town	1,608	1,652	1,861	+	44 + 2.73
Utica town	994	967	1,039	+	14 + 1.42
Vinland town	936	1,013	1,023	+	32 + 3.76
Winchester town	1,030	1,041	1,069	+	11 + 1.06
Winneconne town	698	746	806	+	48 + 6.87
Winneconne village	1,086	1,042	1,130	—	43 — 4.93
Wolf River town	919	970	913	+	51 + 5.54
Total	50,097	58,225	57,627	+	8,128 + 16.22
WOOD COUNTY—					
Auburndale town ¹	2656	959	736	+	303 + 46.18
Auburndale village ¹	253	241	250	—	12 — 4.74
Grand Rapids town	627	825	758	+	198 + 31.57
Greater Grand Rapids city ³	1,702	4,493	4,082	+	2,791 + 163.98
ward 1		552			
ward 2		709			
ward 3		400			
ward 4		625			
ward 5		592			
ward 6		631			
ward 7		516			
ward 8		468			
Lincoln town	870	1,128	997	+	258 + 29.65
Marshfield city	3,450	5,240	4,586	+	1,790 + 51.86
ward 1		1,013			
ward 2		569			
ward 3		1,134			
ward 4		1,140			
ward 5		926			
ward 6		458			
Marshfield town	701	881	777	+	180 + 25.67
Milladore town	760	1,025	878	+	265 + 34.87
Nekoosa village ⁴		745	415		
Pittsville city	653	634	648	—	19 — 2.90
Port Edwards town ⁴	582	1,161	777	+	579 + 99.48
Remington town	427	708	618	+	291 + 68.80
Richfield town	194	571	272	+	377 + 194.33
Rock town	597	823	562	+	226 + 37.85
Rudolph town	1,087	1,046	991	—	41 — 3.77
Saratoga town	326	416	333	+	99 + 27.60
Seneca town	875	976	821	+	101 + 11.54
Sherry town	487	618	612	+	131 + 26.89
Sigel town	1,222	1,483	1,377	+	255 + 51.54
Vesper town	322	774	307	+	452 + 140.37
Wood town	891	1,118	860	+	227 + 25.47
Total	518,127	25,865	21,637	+	7,738 + 42.68

¹Auburndale village, formerly in Auburndale town, now independent.²Exclusive of population of Auburndale village. In 1890 Auburndale town had 656, Auburndale village 253, total 909; in 1900 Auburndale town had 959, Auburndale village 241, total 1200; Increase 291 or 32 per cent.³Formerly Grand Rapids; Centralla city annexed since 1890.⁴Nekoosa village organized from part of Port Edwards town since 1890. In 1900 Nekoosa village had 745, Port Edwards town 1,161, total 1,906; in 1890 Port Edwards town had 582; Increase 1,324 or 227.49 per cent.⁵Includes population (1,435) of Centralla city, annexed to Greater Grand Rapids city.

SUMMARIES OF POPULATION BY COUNTIES, 1890, 1900.

Showing by counties the population of Wisconsin in 1890 and 1900, together with the increase and decrease in 1900 as compared with 1890.

Table V.

Counties.	Population in		Increase + Decrease — in 1900, as compared with 1890.	
	1890.	1900.	Number.	Per cent.
Adams	6,889	9,141	2,252	32.69
Ashland	20,063	20,176	113	.56
Barron	15,416	23,677	8,261	53.60
Bayfield	7,390	14,392	7,002	94.75
Brown	39,164	46,359	7,195	18.37
Buffalo	15,997	16,765	768	4.79
Burnett	4,393	7,478	3,085	70.22
Calumet	16,639	17,078	439	2.64
Chippewa	25,143	33,037	7,894	31.39
Clark	17,708	25,848	8,140	45.96
Columbia	28,350	31,121	2,771	9.77
Crawford	15,987	17,286	1,299	8.12
Dane	59,578	69,435	9,857	16.54
Dodge	44,984	46,631	1,647	3.66
Door	15,682	17,583	1,901	12.12
Douglas	13,468	36,335	22,867	169.77
Dunn	22,664	25,043	2,379	10.49
Eau Claire	30,673	31,692	1,019	3.32
Florence	2,604	3,197	593	22.77
Fond du Lac	44,088	47,589	3,501	7.94
Forest	1,012	1,396	384	37.94
Grant	26,651	38,881	12,230	45.90
Green	22,732	22,719	13	.06
Green Lake	15,163	15,797	634	4.18
Iowa	22,117	23,114	997	4.50
Iron	15,797	17,466	1,669	10.56
Jackson	33,530	34,789	1,259	3.75
Jefferson	17,121	20,628	3,507	20.48
Juneau	15,581	21,707	6,126	39.21
Kenosha	18,163	17,212	1,051	5.85
Kewaunee	88,801	42,997	4,196	10.81
La Crosse	20,265	20,969	694	3.42
Lafayette	9,465	12,563	3,098	32.62
Langlade	12,008	16,269	4,261	35.48
Lincoln	37,831	42,261	4,430	11.70
Manitowoc	30,369	43,256	12,887	42.43
Marathon	20,304	30,822	10,518	51.80
Marquette	9,676	10,509	833	8.60
Millwaukee	236,101	330,017	93,916	39.78
Monroe	23,211	28,103	4,892	21.07
Oconto	15,009	20,874	5,865	39.07
Oneida	5,010	8,875	3,865	77.14
Outagamie	38,690	46,247	7,557	19.53
Ozaukee	14,943	16,363	1,420	9.50
Pepin	6,932	7,905	973	14.03
Pierce	20,385	23,943	3,558	17.45
Polk	12,968	17,801	4,833	37.26
Portage	24,798	29,483	4,685	18.88
Price	5,258	9,106	3,848	73.18
Racine	36,268	45,644	9,376	25.90
Richland	19,121	19,483	362	1.89
Rock	43,220	51,203	7,983	18.49
St. Croix	23,139	26,830	3,691	15.95
Sauk	30,575	33,006	2,431	7.95
Sawyer	1,977	3,593	1,616	81.74
Shawano	19,236	27,475	8,239	42.83
Sheboygan	42,489	50,345	7,856	18.48
Taylor	6,731	11,262	4,531	67.31
Trempealeau	18,920	23,114	4,194	22.16
Vernon	25,111	28,351	3,240	12.90
Vilas	27,860	29,259	1,399	5.00
Walworth	2,926	5,521	2,595	88.69
Washburn	22,761	23,589	828	3.68
Washington	33,270	35,222	1,952	5.88
Waukesha	26,794	31,615	4,821	17.99
Waupaca	13,507	15,972	2,465	18.24
Waushara	50,097	58,223	8,126	16.22
Winnebago	18,127	25,865	7,738	42.68
Totals	1,686,880	2,069,042	382,162	22.66

SUMMARIES SHOWING THE POPULATION IN THE CITIES IN WISCONSIN IN 1890 AND 1900.

Together with the increase or decrease in 1900 as compared with 1890.

Table VI.

Cities.	Counties.	Population.		Increase + Decrease — in 1900, as compared with 1890.	
		1890.	1900.	Number.	Per cent.
Algoma	Kewaunee	1,015	1,738	+	71.23
Alma	Buffalo	1,428	1,201	—	15.89
Altoona	Eau Claire	806	721	—	10.43
Antigo	Langlade	4,424	5,145	+	16.29
Appleton	Outagamie	11,869	15,085	+	27.09
Ashland	Ashland	9,966	13,074	+	31.31
Augusta	Eau Claire	1,187	1,256	+	5.81
Baraboo	Sauk	4,605	5,751	+	24.88
Barron	Barron	829	1,493	+	80.09
Beaver Dam	Dodge	4,222	5,128	+	21.45
Beloit	Rock	6,315	10,436	+	65.25
Berlin	Green Lake	4,149	4,489	+	8.19
Black River Falls	Jackson	2,261	1,938	—	14.28
Boscobel	Grant	1,570	1,637	+	4.27
Brodhead	Green	1,461	1,584	+	8.41
Buffalo	Buffalo	223	254	+	13.89
Burlington	Racine	2,043	2,526	+	23.64
Cedarburg	Ozaukee	1,361	1,626	+	19.47
Chetek	Barron	406	531	+	30.78
Chilton	Calumet	1,424	1,460	+	2.52
Chippewa Falls	Chippewa	8,670	8,094	—	6.64
Climonville	Waupaca	1,466	1,663	+	12.75
Colby	Clark		667		
Columbus	Columbia	1,977	2,349	+	18.81
Cumberland	Barron	1,219	1,328	+	8.94
Darlington	Lafayette	1,589	1,808	+	13.77
Delavan	Walworth	2,038	2,244	+	10.10
Depere	Brown	3,625	4,038	+	11.39
Dodgeville	Iowa	1,722	1,865	+	8.30
Durand	Peplin	1,154	1,458	+	26.34
Eau Claire	Eau Claire	17,415	17,517	+	.58
Edgerton	Rock	1,595	2,192	+	37.43
Elkhorn	Walworth	1,447	1,731	+	19.62
Elroy	Juneau	1,413	1,685	+	19.25
Evansville	Rock	1,523	1,864	+	22.38
Fond du Lac	Fond du Lac	12,024	15,110	+	25.66
Fort Atkinson	Jefferson	2,283	3,043	+	33.28
Fountain City	Buffalo	972	1,031	+	6.07
Glenwood	St. Croix		1,789		
Greater Grand Rapids	Wood	1,702	4,493	+	163.98
Green Bay	Brown	9,069	18,684	+	106.02
Greenwood	Clark		708		
Hartford	Washington	1,296	1,632	+	25.92
Horicon	Dodge	1,354	1,376	+	1.62
Hudson	St. Croix	2,885	3,269	+	12.96
Janesville	Rock	10,836	13,185	+	21.67
Jefferson	Jefferson	2,287	2,584	+	12.98
Juneau	Dodge	701	891	+	27.10
Kaukauna	Outagamie	4,667	5,115	+	9.59
Kenosha	Kenosha	6,532	11,606	+	77.68
Kewaunee	Kewaunee	1,216	1,773	+	45.80
La Crosse	La Crosse	25,090	28,895	+	15.16
Lake Geneva	Walworth	2,297	2,585	+	12.53
Lancaster	Grant	1,543	2,403	+	55.73
Madison	Dane	13,426	19,164	+	42.73
Manitowoc	Manitowoc	7,710	11,786	+	52.86
Marquette	Marquette	11,523	16,195	+	40.54
Marshfield	Wood	3,450	5,240	+	51.86
Mauston	Juneau	1,343	1,718	+	27.92
Mayville	Dodge	1,165	1,815	+	55.79
Medford	Taylor	1,193	1,758	+	47.36
Menasha	Winnebago	4,581	5,589	+	22.00
Menominee	Dunn	5,491	5,655	+	2.98
Merrill	Lincoln	6,809	8,537	+	25.37

POPULATION OF WISCONSIN.

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Table VI—Continued.

Cities.	Counties.	Population.		Increase + Decrease — in 1900, as compared with 1890.	
		1890.	1900.	Number.	cent.
Milwaukee	Milwaukee	204,468	235,315	+ 30,847	+ 39.54
Mineral Point	Iowa	2,694	2,991	+ 297	+ 11.02
Mondovi	Buffalo	503	1,208	+ 705	+ 140.15
Monroe	Green	3,768	3,927	+ 159	+ 4.22
Necedah	Winnebago	5,083	5,954	+ 871	+ 17.13
Neenah	Clark	1,836	2,104	+ 268	+ 8.67
New Lisbon	Juneau	990	1,014	+ 24	+ 2.42
New London	Outagamie	2,050	2,742	+ 692	+ 33.75
New Richmond	St. Croix	1,408	1,631	+ 223	+ 15.83
Oconomowoc	Waukesha	2,729	2,880	+ 151	+ 5.53
Oconto	Oconto	5,219	5,646	+ 427	+ 8.18
Onalaska	La Crosse	1,587	1,368	- 219	- 13.79
Oshkosh	Winnebago	22,836	23,284	+ 448	+ 2.35
Phillips	Price		1,820		
Pittsville	Wood	653	634	- 19	- 2.90
Platteville	Grant	2,740	3,340	+ 600	+ 21.90
Plymouth	Sheboygan	1,568	2,257	+ 689	+ 50.16
Portage	Columbia	5,143	5,469	+ 326	+ 6.14
Port Washington	Ozaukee	1,659	3,010	+ 1,351	+ 81.43
Prairie du Chien	Crawford	3,131	3,232	+ 101	+ 3.22
Prescott	Pierce	911	1,002	+ 91	+ 9.98
Racine	Racine	21,014	29,102	+ 8,088	+ 38.48
Reedsburg	Sauk	1,737	2,225	+ 488	+ 28.09
Rhineland	Oneida	2,658	4,998	+ 2,340	+ 88.03
Rice Lake	Barron	2,130	3,002	+ 872	+ 40.93
Richland Center	Richland	1,819	2,321	+ 502	+ 27.59
Ripon	Fond du Lac	3,358	3,818	+ 460	+ 13.69
River Falls	Pierce	1,783	2,008	+ 225	+ 12.61
Seymour	Outagamie	733	1,026	+ 293	+ 39.97
Shawano	Shawano	1,506	1,863	+ 357	+ 23.78
Sheboygan	Sheboygan	16,359	22,962	+ 6,603	+ 40.36
Shullsburg	Lafayette	1,393	1,250	- 143	- 10.26
South Milwaukee	Milwaukee		3,392		
Sparta	Monroe	2,795	3,555	+ 760	+ 27.19
Stanley	Chippewa		2,387		
Stevens Point	Portage	7,896	9,524	+ 1,628	+ 20.61
Stoughton	Dane	2,470	3,431	+ 961	+ 38.90
Sturgeon Bay	Door	2,195	3,372	+ 1,177	+ 53.16
Superior	Douglas	11,983	31,091	+ 19,108	+ 159.45
Tomah	Monroe	2,199	2,840	+ 641	+ 29.14
Tomahawk	Lincoln	1,816	2,291	+ 475	+ 26.15
Two Rivers	Manitowoc	2,870	3,764	+ 894	+ 31.84
Viroqua	Vernon	1,270	1,950	+ 680	+ 53.54
Watertown	Dodge	8,755	8,437	- 318	- 3.63
Waukesha	Waukesha	6,321	7,419	+ 1,098	+ 17.37
Waupaca	Waupaca	2,127	2,912	+ 785	+ 36.90
Waupun	Dodge	2,757	3,185	+ 428	+ 15.16
Wausau	Marathon	9,253	12,354	+ 3,101	+ 33.51
Wautoma	Milwaukee		2,842		
West Bend	Washington	1,296	2,119	+ 823	+ 63.50
Whitewater	Wolworth	4,359	3,405	- 954	- 21.88
Total		617,713	875,868	+ 258,155	+ 41.80

SUMMARIES SHOWING THE POPULATION IN THE VILLAGES IN
WISCONSIN IN 1890 AND 1900.

Together with the increase and decrease in same in 1900 as compared with 1890.

Table VII.

Villages.	Counties.	Population.		Increase + Decrease - in 1900, as compared with 1890.	
		1890.	1900.	Number.	Per cent.
Abbotsford	Clark		443		
Ableman	Sauk	332	430	+	29.51
Albany	Green	638	797	+	14.13
Amery	Polk	451	905	+	100.66
Amherst	Portage	438	558	+	27.19
Arcadia	Trempealeau	669	1,273	+	93.17
Auburndale	Wood	253	241	-	4.74
Avoca	Iowa	278	406	+	46.04
Baldwin	St. Croix	482	631	+	30.91
Bangor	La Crosse	499	633	+	26.85
Bayfield	Bayfield	1,373	1,689	+	23.01
Belleville	Dane	319	386	+	20.68
Belmont	Lafayette	378	509	+	34.63
Benton	Lafayette	414	546	+	31.88
Biramwood	Shawano		410		
Blair	Trempealeau		438		
Blanchardville	Lafayette		573		
Bloomer	Chippewa	631	811	+	28.52
Bloomington	Grant	587	611	+	4.09
Boyd	Chippewa	545	674	+	23.67
Brandou	Fond du Lac	660	663	+	.45
Brillion	Calumet	582	855	+	46.89
Browtown	Green		246		
Cadott	Chippewa	889	840	-	5.51
Cambridge	Columbia	524	561	+	7.61
Cameron	Barron		394		
Camp Douglas	Juneau	225	432	+	92.00
Cashton	Monroe		510		
Cassville	Grant	886	979	+	10.50
Cedar Grove	Sheboygan		327		
Clear Lake	Polk		527		
Clinton	Rock	856	871	+	1.75
Cudahy	Grant	636	636		
Dane	Milwaukee		1,366		
Dartford	Dane		280		
Deerfield	Green Lake	204	450	+	120.59
De Soto	Dane	338	515	+	52.36
Eagle	Crawford	355	387	+	9.01
Edgar	Waukesha		324		
Elkhart Lake	Marathon		478		
Ellsworth	Sheboygan		464		
Embarrass	Pierce	670	1,062	+	57.01
Fairchild	Waupaca		270		
Fennimore	Eau Claire	645	947	+	46.82
Fox Lake	Grant	616	1,035	+	68.01
Fremont	Dodge	814	890	+	9.33
Galesville	Waupaca	275	263	-	4.34
Grafton	Trempealeau	537	862	+	60.51
Grantsburg	Ozaukee	434	478	+	10.13
Grantlot	Burnett	410	612	+	49.26
Hammond	Lafayette		335		
Hartland	St. Croix	388	404	+	4.09
Hazel Green	Waukesha	486	629	+	29.42
Highland	Grant	426	442	+	3.75
Hilbert	Iowa	751	913	+	21.57
Hillsboro	Calumet		497		
	Vernon	461	785	+	70.28

Table VII—Continued.

Villages.	Counties.	Population.		Increase + Decrease — in 1900, as compared with 1890.			
		1890.	1900	Number.	Per cent.		
Hortonville	Outagamie	440	913	+	473	+	107.50
Independence	Trempealeau	382	630	+	248	+	64.92
Iola	Waupaca	558	460	+	156	+	51.31
Kendall	Monroe	304	679	+	122	+	21.90
Kewaskum	Washington	557	924	+	427	+	85.91
Kiel	Manitowoc	497	924	+	427	+	85.91
Kilbourn City	Columbia	961	1,134	+	173	+	18.00
La Farge	Vernon	488	488	+	0	+	0.00
Lake Mills	Jefferson	1,063	1,387	+	334	+	31.71
Lavalle	Sauk	333	386	+	53	+	15.91
Linden	Iowa	462	543	+	81	+	17.53
Little Chute	Outagamie	380	944	+	564	+	148.42
Lodi	Columbia	736	1,068	+	332	+	45.10
Lomira	Dodge	492	512	+	170	+	49.70
Lone Rock	Richland	342	333	+	29	+	9.64
Lowell	Dodge	304	645	+	79	+	32.51
Loyal	Clark	243	200	+	39	+	11.37
Lynxville	Crawford	243	304	+	39	+	11.37
McMillan	Marathon	343	350	+	394	+	112.57
Malden Rock	Pierce	343	358	+	270	+	104.65
Manawa	Waupaca	350	470	+	132	+	28.68
Marathon	Marathon	258	475	+	231	+	48.63
Marion	Waupaca	470	602	+	132	+	12.76
Markesan	Green Lake	475	706	+	231	+	48.63
Mazomanie	Dane	1,034	902	+	132	+	12.76
Menominee Falls	Waushara	422	687	+	265	+	62.79
Merrillan	Jackson	639	739	+	100	+	15.64
Merrimac	Sauk	350	467	+	160	+	34.28
Montfort	Grant	467	627	+	152	+	37.34
Monticello	Green	407	559	+	230	+	53.80
Mosinee	Marathon	427	657	+	230	+	53.80
Mt. Horeb	Dane	864	743	+	138	+	22.81
Muscoda	Grant	605	743	+	138	+	22.81
Necedah	Juneau	1,708	1,209	+	499	+	29.21
Nekoosa	Wood	746	485	+	169	+	53.48
North Freedom	Sauk	316	1,049	+	357	+	10.22
North Milwaukee	Milwaukee	316	1,049	+	357	+	10.22
Norwalk	Monroe	357	389	+	102	+	17.10
Omro	Winnebago	1,232	697	+	82	+	21.35
Ontario	Monroe	389	466	+	82	+	21.35
Oregon	Dane	595	472	+	149	+	26.27
Osceola	Polk	384	716	+	338	+	87.50
Osseo	Trempealeau	472	788	+	316	+	66.95
Palmyra	Jefferson	567	716	+	149	+	26.27
Pardeeville	Columbia	788	894	+	106	+	13.45
Pepin	Pepin	369	407	+	38	+	10.29
Pewaukee	Waushara	690	714	+	34	+	5.00
Plainfield	Waushara	459	728	+	269	+	58.60
Potosi	Grant	434	633	+	116	+	22.43
Poynette	Columbia	517	656	+	94	+	16.72
Prairie du Sac	Sauk	562	656	+	94	+	16.72
Prentice	Price	539	1,202	+	216	+	21.90
Princeton	Green Lake	986	738	+	333	+	82.22
Randolph	Columbia	406	403	+	0	+	0.00
Readstown	Vernon	403	428	+	25	+	6.20
Reedsville	Manitowoc	428	393	+	64	+	19.45
Reeseville	Dodge	329	479	+	140	+	41.29
Rio	Columbia	339	622	+	123	+	16.51
St. Croix Falls	Polk	745	810	+	66	+	7.53
Sauk City	Sauk	878	320	+	117	+	27.08
Scandinavia	Waupaca	432	945	+	67	+	7.63
Schlesingererville	Washington	432	945	+	67	+	7.63
Sharon	Walworth	878	1,301	+	183	+	16.36
Sheboygan Falls	Sheboygan	1,118	690	+	0	+	0.00
Soldiers Grove	Crawford	690	621	+	4	+	.64
Spring Green	Sauk	625	1,021	+	234	+	33.23
Spring Valley	Pierce	621	938	+	317	+	51.21
Sun Prairie	Dane	704	938	+	234	+	33.23

Table VII—Continued.

Villages.	Counties.	Population.		Increase + Decrease — in 1900, as compared with 1890.	
		1890.	1900.	Number.	Per cent.
Theresa	Dodge		355		
Thorp	Clark	723	838	+ 115	+ 15.90
Tigerton	Shawano		723		
Trempealeau	Trempealeau		609		
Turtle Lake	Barron		326		
Union Grove	Racine	432	520	+ 88	+ 20.37
Viola	Richland		432		
Waterloo	Jefferson	862	1,137	+ 275	+ 31.90
Waukegan	Dane	812	443	+ 131	+ 41.98
Wauzeka	Crawford		471		
Westly	Vernon		524		
West Salem	La Crosse	542	726	+ 183	+ 33.76
Weyauwega	Waupaca	706	911	+ 205	+ 29.03
Whitefish Bay	Milwaukee		512		
Whitehall	Trempealeau	304	600	+ 296	+ 97.36
Wilton	Monroe		400		
Winneconne	Winnebago	1,086	1,042	— 48	— 4.05
Wittenberg	Shawano	726	798	+ 72	+ 9.90
Woneewoc	Juneau	619	811	+ 192	+ 31.01
Wrightstown	Brown	476	420	— 56	— 11.76
Total		55,274	94,466	+ 39,287	+ 74.73

The preceding pages of this part, as pointed out already, are devoted to the population of this state. The facts presented in this connection are included in seven tables; and in order to convey a better idea of what these tables really contain, it will be necessary to repeat in part what has already been said regarding them.

Table I.—This table shows the total population of the state at the different censuses since 1840, together with the increase that took place as between each census.

Table II.—In this table is found the population, by counties, at each census since 1840.

Table III.—Shows the area, in square miles, of the land surface in each county in the state.

Table IV.—This table gives the population for 1890, 1895, and 1900, by counties and other minor civil divisions. The table is so arranged that the counties appear in alphabetical order. Under each county is then given the figures for each town, city, and village which is located in the same. This table also shows in each case the increase or decrease, as the case may be, in the population in 1900 as compared with 1890. The table is quite lengthy, covering 45 pages.

The four tables thus described have been compiled from the reports of the different censuses, and thus constitute the basic data. Table IV is of course the most important in the series, giving and comparing, as it does, the population of the state, by each of the minor civil divisions, at the three last censuses. The three tables which immediately follow table IV are merely summaries of that table and may be described as follows:

Table V is a summary, by counties, of the population of the state in 1890 and 1900, giving also, in each instance, the increase or decrease in the latter year. Tables VI and VII, respectively are summaries, by cities and villages of the population for the two years in question and the changes which took place during the period. These three tables will be the subject of further analysis.

In table V is seen that there were 68 counties in the state in 1890, and 70 counties in 1900, and that the population in these counties or in the state numbered 1,686,880 in the former year and 2,069,042 in the latter. During the decade, or between the two censuses, there was thus an increase of 382,162 persons, or 22.66 per cent. in the population in Wisconsin. Practically every county has contributed to this increase, as is seen from the fact that all but one show a growth during the last decade.

In the following table the counties have been classified according to the percentage of increase in population during the last decade, or from 1890 to 1900:

Classification of Increases.	Number of counties.	Per cent.
Over 100 per cent.	1	1.50
75 per cent. but less than 100 per cent.	4	6.00
50 per cent. but less than 75 per cent.	5	7.35
25 per cent. but less than 50 per cent.	15	22.00
10 per cent. but less than 25 per cent.	23	33.80
5 per cent. but less than 10 per cent.	9	13.20
Less than 5 per cent.	11	16.15
Total counties included	68	100.00

The above table shows that there was only one county in the state in which the number of inhabitants more than doubled during the last census period. The county in question is that

of Douglas, where the increase amounted to 169.77 per cent. The increase in this case is due almost entirely to rapid growth of the city of Superior, which is located in that county.

While Douglas is the only county in which the population more than doubled; there are several in which the increases were quite large. Thus there are four counties with an increase of over 75 per cent., and five with increase of over 50 per cent. In fifteen counties the increase varied between 25 and 50 per cent., while in twenty-three others it ranged from 10 to 25 per cent., and twenty had less than 10 per cent. As pointed out already the average increase for the state was 22.66 per cent. Counting the counties which exceeded and fell short of the average, it is found that the former includes 26 and the latter 52 counties.

CLASSIFICATION BY COUNTIES, 1890.

Counties.	Number of counties.	Population.
Under 5,000	5	12,912
5,000 but under 10,000	8	57,351
10,000 but under 20,000	21	334,561
20,000 but under 30,000	16	375,687
30,000 but under 40,000	11	385,822
40,000 but under 50,000	4	174,781
Over 50,000	3	345,776
Total	68	1,686,890

CLASSIFICATION BY COUNTIES, 1900.

Counties.	Number of counties.	Population.
Under 5,000	4	13,115
5,000 but under 10,000	7	54,642
10,000 but under 20,000	16	253,791
20,000 but under 30,000	20	490,758
30,000 but under 40,000	10	336,527
40,000 but under 50,000	8	360,994
Over 50,000	5	559,225
Total	70	2,069,042

In the preceding two tables, the counties have been classified according to their population at each of the two census years. Thus we find here the number of counties each year which had a population of less than 5,000 each, the number of counties

that had 5,000 but less than 10,000, and so on. These tables are interesting because they show the relative importance of the various counties.

The tables also confirm what has already been shown, namely, that there was a steady increase in population between the two censuses. The increase is shown in this, that there was a reduction in number of counties in the lower classes and an increase in the number in the higher classes. As an example of this it may be pointed out that the counties with less than 5,000 decreased from 5 to 4, and that those with over 50,000 increased from 3 to 5 in number.

It is clearly apparent from table IV that the more marked increases in population took place in the newer counties, or in the northern parts of the state. There are, of course, a few exceptions to this, as may be seen from the figures for such counties in the southern or eastern parts where our manufacturing centers are found. That the northern counties, however, should show greater increases is only natural. Most of these counties are comparatively new, with plenty of low-priced and tillable land, and with their other resources in a comparatively undeveloped state. These counties without question offered favorable opportunities for enterprise and capital. Conditions for development were ripe, and those who were looking for a chance to clear up a new farm or build up a new business have taken advantage of this, with the result that the northern parts of the state are growing at a rapid rate both in population and wealth.

Table VI, as explained, deals with the cities in this state. It contains the figures giving the population in the cities at the last two federal censuses. It also shows the increases and decreases at the last census both in actual figures and in percentages. In going over this table it will among other things be noticed that there were 109 cities in 1890 as against 115 in 1900, or an increase of 6, and that the cities in existence in 1890, 100 had an increase in population, while 9 give a decrease.

The population of the 100 cities incorporated in 1890 was 647,713 in that year, and 862,971 in 1900, an increase of

215,258 persons, or of 33.23 per cent. Adding the population of the six cities which have been incorporated as such during the last decade which foot up to about 12,897, and we find a city population in 1900 of 875,868. The population of all places incorporated as cities was thus 647,713 in 1890 and 875,868 in 1900, an increase of 228,355 persons, or of 35.25 per cent. When the six cities which have been created since 1890 are included, there is thus an increase in the city population of 35.25 per cent.; when these cities are excluded, the increase is two per cent. less.

In classifying the cities according to their ratio of increase on the same basis as in the classification already given for the counties, the following results are obtained:

Classification.	Number.	Per cent.
Over 100 per cent.	4	4.00
75 per cent. but less than 100 per cent.	4	4.00
50 per cent. but less than 75 per cent.	10	10.00
25 per cent. but less than 50 per cent.	30	30.00
10 per cent. but less than 25 per cent.	32	32.00
5 per cent. but less than 10 per cent.	12	12.00
Under 5 per cent.	8	8.00
Total cities given, Increase	100	100.00

According to this table, 100 of the cities which had been organized as such in 1890 show a growth in population during the last decade. About 8 per cent. of these cities show an increase of over 75 per cent., and 40 per cent. show an increase of from 25 to 75 per cent. The remaining cities, which number about 52 per cent. of the total, give an increase of less than 25 per cent. As has been seen, the average increase for the cities was 35.25 per cent., as against 22.66 per cent. for the whole state.

As pointed out above, nine cities had a decrease in population during the last period. These cities are: Alma, Altoona, Black River Falls, Chippewa Falls, Onalaska, Pittsville, Shullsburg, Watertown, and Whitewater. The decreases for these cities were not large. For six of them it ranged from 10 to 25 per cent.; for one city, from 5 to 10 per cent., and for the remaining two cities it was less than five per cent.

The following cities were created during the last decade: Colby, Glenwood, Philips, South Milwaukee, Stanley, and Wan-

watosa. These places are of course small as yet, having a combined population of only 12,897. Some of them, however, are so located that they may show considerable growth in the future.

CLASSIFICATION OF CITIES ACCORDING TO POPULATION IN 1890.

Classification.	Number of cities.	Total population.
Under 500 population	2	629
500 but under 1,000	9	7,097
1,000 but under 5,000	70	152,922
5,000 but under 10,000	15	108,222
10,000 but under 25,000	10	149,285
25,000 but under 35,000	1	25,090
Milwaukee	1	204,468
Total	108	647,713

CLASSIFICATION OF CITIES ACCORDING TO POPULATION IN 1900.

Classification.	Number of cities.	Total population.
Under 500 population	1	254
500 but under 1,000	6	4,152
1,000 but under 5,000	75	174,924
5,000 but under 10,000	15	96,693
10,000 but under 25,000	13	197,158
25,000 but under 35,000	4	117,372
Milwaukee	1	235,315
Total	115	875,868

In the above tables the cities are classified according to their population. Here we see that in 1890 two cities had a population of less than 500, while in 1900 only one city had less than this number. In the former year, 9 cities had a population of from 500 to 1,000; in the latter year, only 6 cities come in this class. In the third class in order, there were 70 cities in 1890, and 75 in 1900. The class, 5,000 but less than 10,000, had 15 cities for both years. While in this case there was no change in the number of the cities, there was a decrease of the total population from 108,222 to 96,693. In all the other classes, however, there was an increase for the latter year. The cities themselves increased in number from 108 to 115.

**POPULATION OF EACH OF THE FIVE LEADING CITIES IN THE STATE
AT EACH FEDERAL CENSUS SINCE ORGANIZED OR SINCE 1840.**

CENSUS YEARS.				MILWAUKEE.		
				Population.	Increase.	
					Number.	Per cent.
1840	.....	.....	.....	1,712	.....	.....
1850	.....	.....	.....	20,061	18,349	1,071.8
1860	.....	.....	.....	45,246	25,185	125.5
1870	.....	.....	.....	71,440	26,194	57.9
1880	.....	.....	.....	115,587	44,147	61.8
1890	.....	.....	.....	204,468	88,881	76.9
1900	.....	.....	.....	285,315	80,847	39.5

CENSUS YEARS.				LA CROSSE.			OSHKOSH.		
				Popula- tion.	Increase.		Popula- tion.	Increase.	
					Number.	Per cent.		Number.	Per cent.
1860	.....	3,860	.....	.....	.....	.....	6,086	.....	.....
1870	.....	7,785	.....	.....	3,925	101.7	12,663	6,577	108.1
1880	.....	14,505	.....	.....	6,720	86.3	15,748	3,085	24.4
1890	.....	25,090	.....	.....	10,585	73.0	22,836	7,088	45.0
1900	.....	28,885	.....	.....	3,806	15.2	26,284	5,448	23.9

CENSUS YEARS.				RACINE.			SUPERIOR.		
				Popula- tion.	Increase.		Popula- tion.	Increase.	
					Number.	Per cent.		Number.	Per cent.
1850	.....	5,107	.....	.....	.....	.....	.....	.....	.....
1860	.....	7,822	.....	.....	2,715	53.2	.....	.....	.....
1870	.....	9,890	.....	.....	2,068	26.3	.....	.....	.....
1880	.....	16,031	.....	.....	6,151	62.3	.....	.....	.....
1890	.....	21,014	.....	.....	4,983	31.1	11,983	.....	.....
1900	.....	29,102	.....	.....	8,088	38.5	31,091	19,108	159.5

In the preceding tables is found the population of each one of the five leading cities in the state at each census since 1840, or since the cities were organized as such. The cities included are: Milwaukee, La Crosse, Oshkosh, Racine and Superior. All of these are manufacturing or commercial centers, and show a rapid growth.

Milwaukee was first enumerated separately in 1840, and at that time had a population of 1,712. Its growth since that time has been great. Up to 1850 it amounted to 1071.8 per cent., and in the succeeding decades it has only fallen below 50 per cent. in one case, namely, in the last decade, when it stood at

39.5 per cent. The actual increase, however, in the last ten years was greater than during any preceding period save one, that between 1880 and 1890.

La Crosse and Oshkosh appeared as cities for the first time in the census of 1860. At that census the former had a population of 3,860, and the latter of 6,086. During the next decade ending in 1870, the population in both of these places more than doubled. Since that time, the growth has continued at a fair rate. La Crosse is located on the Mississippi River on the western boundary of the state. Oshkosh is located on Lake Winnebago on the eastern boundary line.

Racine and Superior made their appearance in the census 40 years apart. Racine is given in 1850, when it had a population of 5,107, and is one of the oldest places in the state. Superior did not appear until in 1890, but at this time had a population of 11,983, and shows a remarkable growth during the last decade. Both of these cities are manufacturing and commercial centers, and the chances are that their growth will continue at a high rate for many years to come. Racine is located on Lake Michigan in the southeastern part of the state. Superior, on the other hand, occupies the northwest corner of the state on Lake Superior. It has a magnificent harbor, and large shipping and other interests.

Table VII is a summary of the population in all places in the state that were organized under a village government. These places numbered 98 in 1890, and 145 in 1900, an increase of 47 places. The 98 villages in 1890 had a population of 55,274, as against 94,466 persons for the 145 villages in 1900. This makes an increase in population for these places of 39,287 persons, or 74.73 per cent. According to these figures the population in the villages increased at a greater ratio than that for the towns and cities.

Of the 98 villages which were in existence as such in 1890, 85 show an increase in population during the last decade, and 13 show a decrease. These changes are classified as follows:

Classification.	Number counties.
Over 100 per cent.	5
75 per cent. but less than 100 per cent.	5
50 per cent. but less than 75 per cent.	12
25 per cent. but less than 50 per cent.	30
10 per cent. but less than 25 per cent.	24
5 per cent. but less than 10 per cent.	4
Under 5 per cent.	5
Total places	85

In the above table, the villages are classified according to their ratio of increase. It shows that for 5 villages the population increased over 100 per cent., and that in 5 others it ranged from 75 to 100 per cent. The class, 50 but less than 75 per cent., contains 12 villages, and the two next classes in order include 30 and 24 villages respectively. The latter two classes are thus the heaviest in the table. The last two classes, those giving increases of 5 to 10 per cent., and less than 5 per cent., include only 4 and 5 villages respectively. In considering these facts in connection with table VII, it will appear that the villages in this state fully held their own in the general progress.

Only 13 of the 98 villages showed a decrease in 1900. This is a very small proportion, and serves to emphasize the growth already pointed out. This is also further strengthened by the fact that the decreases were comparatively small. Practically all were below 25 per cent., while in more than one-half of the cases they were below 10 per cent.

From the foregoing facts, the following summaries of the population in villages, cities, and towns have been made:

VILLAGES.

Year.	Number of places.	Population.
1900	145	94,467
1890	99	55,274
Increase, number	46	39,183
Increase, per cent.	46.46	70.88

CITIES.

1900	115	875,867
1890	108	647,713
Increase, number	7	228,154
Increase, per cent.	6.48	35.22

TOWNS.

1900	1,045	1,098,704
1890	975	983,893
Increase, number	70	114,815
Increase, per cent.	7.20	11.67

From these figures it appears that the increase in the number of the villages and of the population of the same, was 46.46 and 70.88 per cent. respectively; that the increase in the cities and their population was 6.48 and 35.22 per cent. respectively; and that the towns increased 7.30 per cent. in number and 11.67 per cent. in population. The number of inhabitants in the towns, cities, and villages, respectively, with their proportion of the total for all will be found in the following presentation:

	1890.		1900.	
	Population.	Per cent.	Population.	Per cent.
Villages	55,274	3.27	94,467	4.63
Cities	647,713	38.40	875,867	42.30
Towns	983,893	58.33	1,098,708	53.07
Total	1,686,880	100.00	2,069,042	100.00

The foregoing figures clearly show that the village and particularly the city population of this state is increasing at a greater ratio than the rural population. In 1890, those living in villages constituted 3.27 per cent. of the total, while in 1900 they constituted 4.63 per cent., an increase for the latter year of about one and one-third per cent. In the cities the increase during this period was even more pronounced, being nearly four per cent., or from 38.40 to 42.30 per cent. As against these increases, there was a decrease of about five and one-fourth of one per cent. in those who live in towns or who live outside of the cities and villages.

These facts, however, only indicate the general tendency. In no sense do they show the actual and relative urban and rural population. For it is plain that those who live in the villages and in the smaller cities cannot be properly classed with the former. Just where to draw the line between the urban and the rural population, however, is not easily determined. So much depends on location, the nature of the industries, kind of population, etc. Some regard 4,000 as the limit, holding that those who live in places with this number of inhabitants or more should be classed with the urban population. Others, again, think that this class should not include places with less than 8,000 inhabitants. As to which side is in the

right seems to be an open question. It is probable, however, that both are right. The basis of the classification will necessarily have to depend to a great extent upon the purposes for which it is made. In order to show the urban and rural population in either case, the following presentations are included.

In the following table is found the population in places having 4,000 inhabitants or more, and the population in places having less than 4,000 inhabitants:

	1890.		1900.	
	Number.	Per cent.	Number.	Per cent.
4,000 or more	522,826	31.00	714,566	34.5
Less than 4,000	1,164,054	69.00	1,354,486	65.5
Total	1,686,880	100.00	2,069,042	100.00

In 1890, 35 places or cities had a population of 4,000 or more, and the total number of inhabitants in these places was 522,826, or 31 per cent. of the total for the whole state. In 1900, 37 places had 4,000 inhabitants or more, while the total for these places was 714,566, or 34.5 per cent. of the total for the state. On this basis of figuring there was thus an increase in the relation of the urban population of 3.5 per cent. The actual increase was 191,730 persons, or 36.67 per cent.

The table which follows gives the population in places having 8,000 inhabitants or more, and of those having less than this number.

	1890.		1900	
	Number.	Per cent.	Number.	Per cent.
8,000 or more	424,526	25.2	634,437	30.6
Less than 8,000	1,262,354	74.8	1,434,605	69.4
Total	1,686,880	100.00	2,069,042	100.00

In 1890 there were 17 cities in this state which had a population of 8,000 or more, or a total of 424,526 inhabitants. In 1900, 22 cities came in this class and their combined population was 634,437. If the inhabitants of these cities are classed as

urban, it necessarily follows that between the two censuses there was an increase in the urban population of this state of 209,911 persons, or of 49.5 per cent.

The proportion of the urban of the total population was 25.2 per cent. in 1890, and 30.6 per cent. in 1900. There was thus an increase in the relative proportion of this class of the population of 5.4 per cent. during the last decade. From these figures it is plain that the urban population in this state is increasing much more rapidly than the rural.

Some of the leading facts that were obtained at the two last federal censuses of this state have thus been more or less fully analyzed. In this connection the population of the state was classified by counties, towns, cities, and villages. The figures for the two census years were placed in comparison, and the changes which took place during the period, together with a great many other facts, have been pointed out.

Having thus considered a great many facts that may be said to have a more direct bearing upon population, it may be in place to take up some that, while less directly related to them, have a close connection with the census figures. The facts which will be given in this connection relate to the population per square mile, the population in each assembly, senatorial, and congressional district, and the population and area of each state and territory in the United States. These presentations include seven tables, or tables VIII to XV inclusive, and may be explained as follows:

Table VIII shows the population per square mile in each county in the state. For the state as a whole the inhabitants per square mile numbered 31.1 in 1890, and 38 in 1900.

Table IX gives the population in each of the one hundred assembly districts in the state. The largest assembly district in the state in point of population is that of Portage county, which embraces 29,483 inhabitants; the smallest is the second district in Marinette county, with only 14,627 inhabitants. A little over one-half, or about 56, of the districts have a population of over 20,000.

Table X shows the counties and population that are included in each of the 33 senatorial districts in the state.

Table XI gives the population and counties included in each of the eleven congressional districts. In this case as in the case of the assembly and senatorial districts, it will be noticed that the different districts vary considerably as to the number of inhabitants included.

Table XII shows by states and territories, etc., the population in 1890 and 1900, together with the increase or decrease, as the case may be, in the latter year as compared with 1890. The changes are given both in actual number and percentage. It will be noticed in looking over this table that all states or places except Nevada show an increase in population at the last census.

Table XIII shows the gross area in square miles of the United States at each one of the twelve censuses which have been taken since they became a nation. When the first census, that of 1790, was taken, the area of the land and water surface included in the union constituted 827,844 square miles. When the last census, that of 1900, was taken, the area had increased to 3,025,600 square miles. The periods during which there was a change are those ending in 1810, 1820, 1850 and 1860.

Table XIV gives the area in square miles of the land and water surface of each state and territory, including Hawaii, Alaska and Raritan, and New York Bay. In this table the land surface is seen to be 2,970,038 square miles, while the water surface was 55,562 square miles, and the total of both 3,622,933 square miles.

POPULATION PER SQUARE MILE—BY COUNTIES.

(The average number of persons per square mile for the state as a whole was 31.1 in 1890 and 38 in 1900.)

Table VIII.

Counties.	Population per square mile.		Counties.	Population per square mile.	
	1890.	1900.		1890.	1900.
Adams	10.10	13.40	Manitowoc	64.12	71.63
Ashland	21.57	21.69	Marathon	19.82	28.23
Barron	17.56	26.97	Marinette	14.55	22.08
Bayfield	4.94	9.61	Marquette	21.45	23.30
Brown	75.60	89.50	Milwaukee	1,035.53	1,447.44
Buffalo	24.16	25.32	Monroe	25.37	30.71
Burnett	4.99	8.49	Oconto	13.90	19.33
Calumet	52.49	53.87	Oneida	5.57	9.86
Chippewa	12.97	17.05	Outagamie	61.03	72.94
Clark	14.76	21.54	Ozaukee	66.12	72.40
Columbia	36.53	40.10	Peplin	29.13	33.21
Crawford	28.70	31.03	Pierce	37.54	44.09
Dane	41.73	58.45	Polk	13.89	19.08
Dodge	50.89	52.75	Portage	31.00	26.85
Door	34.54	38.73	Price	4.24	7.34
Douglas	10.21	27.55	Racine	112.25	141.31
Dunn	26.85	29.67	Richland	33.20	33.82
Eau Claire	49.47	51.12	Rock	61.08	72.53
Florence	5.23	6.42	St. Croix	32.54	37.73
Fond du Lac	61.23	66.10	Sauk	37.29	40.25
Forest . . . . .	.71	.98	Sawyer	1.47	2.68
Grant	31.68	33.61	Shawano	16.95	24.21
Green	39.47	39.44	Sheboygan	33.31	98.72
Green Lake	41.66	43.40	Taylor	6.98	11.67
Iowa	28.99	30.29	Trempealeau . . .	25.78	31.49
Iron		8.42	Vernon	31.71	35.80
Jackson	16.15	17.86	Vilas		5.43
Jefferson	61.19	63.48	Walworth	49.57	52.06
Juneau	21.67	26.11	Washburn	3.51	6.62
Kenosha	56.86	79.22	Washington	53.78	55.76
Kewaunee	49.40	52.64	Waukesha	69.20	62.69
La Crosse	81.69	90.52	Waupaca	35.77	42.21
Lafayette	31.96	33.06	Wausara	21.14	25.00
Lanlade	11.17	14.68	Winnebago	106.14	123.36
Lincoln	13.57	18.38	Wood	23.09	32.96

ASSEMBLY DISTRICTS AS PER THE APPORTIONMENT OF 1901.

Table IX.

Districts	Populati'n 1900.	Districts.	Populati'n 1900.
Adams and Marquette Co's ¹	19,650	Marinette Co., 2d Dist.....	14,627
Ashland Co.	20,176	Milwaukee Co., 1st Dist.....	23,396
Barron Co.	23,677	Milwaukee Co., 2d Dist.....	23,080
Bayfield, Sawyer and Wash- burn Co's. ²	23,506	Milwaukee Co., 3d Dist.....	22,236
Brown Co., 1st Dist.....	23,372	Milwaukee Co., 4th Dist.....	22,346
Brown Co., 2d Dist.....	22,987	Milwaukee Co., 5th Dist.....	23,247
Buffalo and Pepin Co's. ³	24,670	Milwaukee Co., 6th Dist.....	23,270
Burnett and Polk Co's. ⁴	25,279	Milwaukee Co., 7th Dist.....	20,646
Calumet Co.	17,078	Milwaukee Co., 8th Dist.....	19,332
Chippewa Co., 1st Dist.....	15,676	Milwaukee Co., 9th Dist.....	17,653
Chippewa Co., 2d Dist. ⁵	17,361	Milwaukee Co., 10th Dist.....	17,024
Clark Co.	25,848	Milwaukee Co., 11th Dist.....	21,903
Columbia Co., 1st Dist.....	15,117	Milwaukee Co., 12th Dist.....	20,231
Columbia Co., 2d Dist.....	16,004	Milwaukee Co., 13th Dist.....	17,026
Crawford Co.	17,286	Milwaukee Co., 14th Dist.....	20,651
Dane Co., 1st Dist.....	24,458	Milwaukee Co., 15th Dist.....	20,613
Dane Co., 2d Dist.....	22,510	Milwaukee Co., 16th Dist.....	16,863
Dane Co., 3d Dist.....	22,467	Monroe Co.	23,103
Dodge Co., 1st Dist.....	23,636	Oconto Co.	20,874
Dodge Co., 2d Dist.....	22,995	Outagamie Co., 1st Dist.....	23,102
Door Co.	17,583	Outagamie Co., 2d Dist.....	23,145
Douglas Co., 1st Dist.....	18,040	Ozaukee Co.	16,363
Douglas Co., 2d Dist.....	18,235	Pierce Co.	23,943
Dunn Co.	25,043	Portage Co.	29,483
Eau Claire Co., 1st Dist. ⁶	15,790	Price and Taylor Co's. ⁷	20,363
Eau Claire Co., 2d Dist.....	15,902	Racine Co., 1st Dist.....	24,807
Florence, Forest and Lang- lade Co's. ⁸	17,146	Racine Co., 2d Dist.....	20,837
Fond du Lac Co., 1st Dist....	24,041	Richland Co.	19,483
Fond du Lac Co., 2d Dist....	23,848	Rock Co., 1st Dist.....	16,902
Grant Co., 1st Dist.....	19,694	Rock Co., 2d Dist.....	17,091
Grant Co., 2d Dist.....	19,187	Rock Co., 3d Dist.....	17,210
Green Co.	22,719	St. Croix Co.	26,830
Green Lake Co.	15,797	Sank Co., 1st Dist.....	16,905
Iowa Co.	23,114	Sauk Co., 2d Dist.....	16,101
Iron, Onelda and Vilas Co's. ⁹	20,420	Shawano Co.	27,470
Jackson Co.	17,466	Sheboygan Co., 1st Dist.....	25,143
Jefferson Co., 1st Dist.....	17,377	Sheboygan Co., 2d Dist.....	25,202
Jefferson Co., 2d Dist.....	17,412	Trempealeau Co.	23,114
Juneau Co.	20,629	Vernon Co.	23,351
Kenosha Co.	21,707	Walworth Co.	29,259
Kewaunee Co.	17,212	Washington Co.	23,589
La Crosse Co., 1st Dist.....	21,840	Waukesha Co., 1st Dist.....	17,364
La Crosse Co., 2d Dist.....	21,157	Waukesha Co., 2d Dist.....	17,865
La Fayette Co.	20,959	Waupaca Co., 1st Dist.....	16,337
Lincoln Co.	16,269	Waushara Co.	15,972
Manitowoc Co., 1st Dist.....	20,343	Waupaca Co., 2d Dist.....	15,278
Manitowoc Co., 2d Dist.....	21,918	Winnebago Co., 1st Dist.....	20,317
Marathon Co., 1st Dist.....	21,559	Winnebago Co., 2d Dist.....	18,670
Marathon Co., 2d Dist.....	21,697	Winnebago Co., 3d Dist.....	19,248
Marinette Co., 1st Dist.....	16,195	Wood Co.	25,865
		Total	2,069,042

¹For Marquette county, see Adams.²For Sawyer and Washburn counties, see Bayfield.³For Pepin county, see Buffalo.⁴For Polk county, see Burnett.⁵For Forest and Langlade counties, see Florence.⁶For Onelda and Vilas counties, see Iron.⁷For Taylor county, see Price.⁸For Gates county, see Chippewa second.

SENATORIAL DISTRICTS AS APPORTIONED BY THE LEGISLATURE
OF 1901.

Table X.

Districts.		Population 1900.
First District	Door, Kewaunee and Marinette counties.....	65,617
Second District	Brown and Oconto counties.....	67,233
Third District	Kenosha and Racine counties.....	67,351
Fourth District	Milwaukee 1st—The 1st, 13th, 18th and 21st wards, city of Milwaukee; towns of Granville and Milwaukee, villages of East Milwaukee, North Milwaukee and Whitefish Bay	61,035
Fifth District	Milwaukee 2d—The 2d, 3d, 4th, 6th, 7th, 15th and 16th wards, city of Milwau- kee	69,196
Sixth District	Milwaukee 3d—The 9th, 10th, 19th, 20th and 22d wards, city of Milwaukee.....	71,771
Seventh District	Milwaukee 4th—The 14th and 17th wards, city of Milwaukee, towns of Franklin, Greenfield, Lake, Oak Creek and Wauwatosa, village of Cudahy, cities of South Milwaukee and Wau- watosa	63,533
Eighth District	Milwaukee 5th—The 5th, 8th, 11th, 12th and 23d wards, city of Milwaukee.....	64,482
Ninth District	Adams, Marquette, Waushara and Wood counties	61,487
Tenth District	Pierce and St. Croix counties.....	50,773
Eleventh District	Burnett, Douglas and Polk counties.....	61,614
Twelfth District	Ashland, Bayfield, Price, Sawyer, Taylor and Washburn counties	64,050
Thirteenth District	Dodge county	46,631
Fourteenth District	Outagamie and Shawano counties.....	73,722
Fifteenth District	Calumet and Manitowoc counties.....	59,339
Sixteenth District	Crawford and Grant counties.....	56,167
Seventeenth District	Fond du Lac and Green Lake counties.....	63,386
Eighteenth District	Green, Iowa and Lafayette counties.....	66,792
Nineteenth District	Winnebago county	58,225
Twentieth District	Ozaukee and Sheboygan counties.....	66,708
Twenty-first District	Portage and Waupaca counties.....	61,098
Twenty-second District	Rock county	51,203
Twenty-third District	Jefferson and Walworth counties.....	64,048
Twenty-fourth District	Chippewa and Eau Claire counties.....	64,729
Twenty-fifth District	Clark and Marathon counties	69,104
Twenty-sixth District	Dane county	69,436
Twenty-seventh District	Columbia and Sauk counties.....	64,127
Twenty-eighth District	Richland and Vernon counties	47,834
Twenty-ninth District	Barron, Buffalo, Dunn and Pepin coun- ties	73,390
Thirtieth District	Florence, Forest, Iron, Langlade, Lin- coln, Oneida and Vilas counties.....	53,835
Thirty-first District	Washington and Waukesha counties.....	58,518
Thirty-second District	Jackson, Juneau and Monroe counties.....	66,198
Thirty-third District	La Crosse and Trempealeau counties.....	66,111
Total		2,069,042

CONGRESSIONAL DISTRICTS AS APPORTIONED BY THE LEGISLATURE
OF 1901.

Table XI.

Districts.		Population 1901.
First District	Green, Kenosha, Racine, Rock, Lafayette and Walworth counties.....	191,491
Second District	Adams, Columbia, Dane, Green Lake, Jefferson and Marquette counties.....	179,732
Third District	Crawford, Grant, Iowa, Juneau, Richland, Sauk and Vernon counties.....	180,750
Fourth District	The 2d, 3d, 4th, 5th, 7th, 8th, 11th, 12th, 14th, 15th, 16th, 17th and 23d wards of the city of Milwaukee, the towns of Franklin, Greenfield, Lake, Oak Creek, Wauwatosa, the village of Cudahy, the cities of South Milwaukee and Wauwatosa, in Milwaukee county.....	183,542
Fifth District	The 1st, 6th, 9th, 10th, 13th, 18th, 19th, 20th, 21st and 22d wards of the city of Milwaukee, the towns of Granville and Milwaukee, the villages of East Milwaukee, North Milwaukee and Whitefish Bay, in Milwaukee county, and the county of Waukesha	181,705
Sixth District	Dodge, Fond du Lac, Ozaukee, Sheboygan and Washington counties.....	184,517
Seventh District	Buffalo, Clark, Eau Claire, Jackson, La Crosse, Monroe, Pepin and Trempealeau counties	183,830
Eighth District	Calumet, Manitowoc, Portage, Waupaca, Waushara and Winnebago counties.....	194,634
Ninth District	Brown, Door, Kewaunee, Marinette, Oconto and Outagamie counties.....	179,067
Tenth District	Ashland, Florence, Forest, Iron, Langlade, Lincoln, Marathon, Oneida, Price, Shawano, Taylor, Vilas and Wood counties	190,975
Eleventh District	Barron, Bayfield, Burnett, Chippewa, Douglas, Dunn, Pierce, Polk, St. Croix, Sawyer and Washburn counties.....	217,653
Total population .....	.....	2,069,642

POPULATION OF STATES AND TERRITORIES* IN 1900 AND 1890.

Including in 1890 population specially enumerated.

Table XII.

Classification of States and Territories.	Population.		Increase + Decrease — in	
	1900.	1890.	Number.	Per cent.
Alabama	1,828,697	1,513,401	+ 315,296	+ 20.8
Alaska	63,592	32,052	31,540	98.4
Arizona	122,931	88,243	34,688	39.3
Arkansas	1,311,564	1,128,211	183,353	16.3
California	1,486,063	1,213,398	271,665	22.4
Colorado	539,700	413,249	126,451	30.6
Connecticut	908,420	746,258	162,162	21.7
Delaware	184,735	168,493	16,242	9.6
District of Columbia	278,718	230,392	48,326	21.0
Florida	528,642	391,422	137,120	35.0
Georgia	2,216,331	1,837,353	378,978	20.6
Hawaii	154,001	89,990	64,011	71.1
Idaho	161,772	88,548	73,224	82.7
Illinois	4,821,550	3,826,352	996,198	26.0
Indiana	2,516,462	2,192,404	324,058	14.8
Indian Territory	392,060	180,182	211,878	117.6
Iowa	2,231,853	1,912,297	319,556	16.7
Kansas	1,470,496	1,423,108	42,387	3.0
Kentucky	2,147,174	1,858,635	288,539	15.5
Louisiana	1,381,625	1,118,588	263,037	23.5
Maine	694,466	661,066	33,380	5.0
Maryland	1,188,044	1,042,390	146,654	14.0
Massachusetts	2,805,346	2,238,947	566,399	25.3
Michigan	2,420,982	2,093,890	327,092	15.6
Minnesota	1,751,394	1,310,283	441,111	33.7
Mississippi	1,551,270	1,289,690	261,670	20.3
Missouri	3,106,665	2,679,185	427,480	16.0
Montana	243,329	142,924	100,406	70.3
Nebraska	1,066,300	1,062,656	3,644	0.3
Nevada	42,335	47,355	5,020	10.6
New Hampshire	411,588	376,530	35,058	9.3
New Jersey	1,883,669	1,444,933	438,736	30.4
New Mexico	195,310	160,282	35,028	21.9
New York	7,268,694	6,003,174	1,265,720	21.1
North Carolina	1,893,810	1,617,949	275,861	17.1
North Dakota	319,146	190,983	128,163	67.1
Ohio	4,157,545	3,672,329	485,216	13.2
Oklahoma	398,331	78,475	319,856	467.6
Oregon	413,536	317,704	95,832	30.2
Pennsylvania	6,302,115	5,258,113	1,044,002	19.9
Rhode Island	428,556	345,506	83,050	24.0
South Carolina	1,340,316	1,151,149	189,167	16.4
South Dakota	401,570	348,600	52,970	15.2
Tennessee	2,020,616	1,767,518	253,098	14.3
Texas	3,048,710	2,235,527	813,183	36.4
Utah	276,749	210,779	65,970	31.3
Vermont	343,641	332,422	11,219	3.4
Virginia	1,854,184	1,655,980	198,204	12.0
Washington	518,103	357,232	160,871	45.7
West Virginia	958,800	762,794	196,006	25.7
Wisconsin	2,069,042	1,693,330	375,712	22.2
Wyoming	92,631	62,555	29,976	47.9
Total	76,303,387	63,069,756	13,233,631	21.0

*Includes 91,219 persons in the military and naval service of the United States (including civilian employees, etc.) stationed abroad, not credited to any state or territory.

¹GROSS AREA OF THE UNITED STATES AT THE DIFFERENT CENSUS PERIODS.

Table XIII.

Census years.	Square miles, gross area.	Census years.	Square miles, gross area.
1790	827,844	1850	2,980,959
1800	827,844	1860	3,025,600
1810	1,999,775	1870	3,025,600
1820	2,059,043	1880	3,025,600
1830	2,059,043	1890	3,025,600
1840	2,059,043	1900	3,025,600

AREA OF THE UNITED STATES IN SQUARE MILES IN 1900.

Table XIV.

Classification of states and territories.	Land surface.	Water surface.	Total land and water surface.
Alabama	51,540	710	52,250
Alaska			590,884
Arizona	112,920	100	113,020
Arkansas	53,045	805	53,850
California	155,980	2,380	158,360
Colorado	103,645	280	103,925
Connecticut	4,845	145	4,990
Delaware	1,960	90	2,050
District of Columbia	60	10	70
Florida	54,240	4,440	58,680
Georgia	58,980	495	59,475
Hawaii			6,449
Idaho	84,290	510	84,800
Illinois	56,000	650	56,650
Indiana	35,910	440	36,350
Indiana	31,000	400	56,025
Iowa	55,475	550	56,025
Kansas	81,700	380	82,080
Kentucky	40,000	400	40,400
Louisiana	45,420	3,300	48,720
Maine	29,895	3,145	33,040
Maryland	9,860	2,350	12,210
Massachusetts	8,040	275	8,315
Michigan	57,430	1,485	58,915
Minnesota	79,205	4,160	83,365
Mississippi	46,340	470	46,810
Missouri	68,735	650	69,415
Montana	145,310	770	146,080
Nebraska	76,840	670	77,510
Nevada	109,740	960	110,700
New Hampshire	9,005	300	9,305
New Jersey	7,525	290	7,815
New Mexico	122,460	120	122,580
New York	47,620	1,550	49,170
North Carolina	48,580	3,670	52,250
North Dakota	70,195	600	70,795
Ohio	40,760	300	41,060
Oklahoma	38,830	200	39,030
Oregon	94,560	1,470	96,030
Pennsylvania	44,985	230	45,215
Rhode Island	1,053	197	1,250
South Carolina	30,170	400	30,570
South Dakota	76,850	800	77,650
Tennessee	41,750	300	42,050
Texas	262,290	3,490	265,780
Utah	82,190	2,780	84,970
Vermont	9,135	430	9,565
Virginia	40,125	2,325	42,450
Washington	66,880	2,300	69,180
West Virginia	24,645	135	24,780
Wisconsin	54,450	1,590	56,040
Wyoming	97,575	315	97,890
Delaware Bay		620	620
Raritan Bay and Lower New York Bay		100	100
Total	12,970,038	55,562	3,622,933

¹Exclusive of Alaska and Hawaii.

PART III.

Sweating in the Garment-Making Trades.

MEANING OF THE TERM SWEATING SYSTEM.

The conditions described by the term "sweating," in the sense in which it is used today, have probably always existed. The term itself, however, is not so very old. It probably originated in England, a country the industrial development of which is almost identical with that of our own. In Mr. Howell's "Conflicts of Capital and Labor" there is a reference on page 114 which indicates that the term was known in 1814. Mr. Charles Kingsley in his "Cheap Clothes and Nasty," published in 1849, describes the sweating system as follows:—"Part of the work, if not the whole, is let out to contractors or middlemen—"sweaters," as their victims significantly call them—who, in their turn, let it out again, sometimes to the workmen, sometimes to fresh middlemen, so that of the price paid for labor on each article, not only the workmen, but the sweater, and perhaps the sweater's sweater, and a third, and a fourth, and a fifth, have to draw their profit." This definition connects sweating with the sub-contract system which then prevailed and still is common in the clothes making industries. In fact, it is obviously the trend of this book, as a whole, not only to describe the conditions of labor in the sub-contract trades by the term "sweating," but even to attribute these conditions to the system of contracting and sub-contracting.

This definition, however, does not agree with the conclusions arrived at by a special committee of the House of Lords, ap-

pointed in 1888 to investigate sweating. This committee defines it as "the taking advantage of the poorer and more helpless classes of workers." Its evils, the committee says, are known (1) by an unduly low rate of wages; (2) by excessive hours of labor; (3) by the unsanitary state of the houses in which the work is carried on. The committee further says: "These evils can hardly be exaggerated. The earnings of the lowest class of workers are barely sufficient to sustain existence. The hours of labor are such as to make the lives of the workers' periods of almost ceaseless toil, hard and unlovely to the last degree. The sanitary conditions under which the work is conducted are not only injurious to the health of the persons employed, but are dangerous to the public, especially in the case of the trades concerned in making clothes, as infectious diseases are spread by the sale of the garments made in rooms inhabited by persons suffering from smallpox and other diseases." This committee also assigns much less importance to the contractor or middleman than did Kingsley. It says that the contractor is the consequence, not the cause, of the evil; the instrument, not the hand which gives motion to the instrument, and that he is absent in many cases in which the evils complained of abound. The sweating system may exist under any method of employment when the conditions of the labor market afford abundant materials to supply an unscrupulous employer with workers helplessly dependent on him. In some cases the man known as a sweater is merely an agent, knowing nothing of the business. Sometimes he acts the part of a foreman, and directs the work of every branch, understanding the whole business thoroughly. Often he works as hard as any of his employees.

These two lines of definition fairly represent the views of English investigators of the subject. As a whole, they do not differ materially from those held in this country. Thus we find that the definition given by Mr. Kingsley in England more than fifty years ago substantially agrees with that given in 1892 by the Bureau of Labor of Illinois in an extensive report upon sweating in Chicago. This report, in a general way, holds that the sweating system is of old standing; that it is, in fact, a surviving remnant of the system which immediately preceded the

factory system, a relic of the days when all industry was chiefly conducted upon the piece-price plan in small shops and in the homes of the workers. The actual practice of the sweating system is thus described: It consists of farming out, by competing manufacturers to competing contractors, material for garments, which in turn is distributed among competing men and women to be made up. The middleman, or contractor, is the sweater (though he may also be himself subjected to pressure from above), and his employes are the sweated or oppressed. He contracts to make up a certain garment at a given price per piece, and then hires other people to do the work at a less price, his profit being the difference between the two prices.

This, undoubtedly, correctly describes much of the sweating done in the garment-making industries of this country. It will be noticed, however, that the description implies that all the work is done through the contract system, while in actual practice this is not the case as many of those making wearing apparel in their homes obtain the material from or are employed directly by the wholesale houses. Considerable importance is also attached to the sub-contract system. Here, as has been done by Mr. Kingsley and many other writers, the contractor is made the essential element in the condition of sweating. Col. Carroll D. Wright, United States Commissioner of Labor, in "Practical Sociology" defines sweating as "a condition under which a maximum amount of work in a given time is performed for a minimum wage, and in which the ordinary rules of health and comfort are disregarded." This definition is much broader than those just discussed, corresponding more closely to the conclusions of the committee of the House of Lords.

Four definitions, differing considerably as to their scope and general idea, have thus been given. Those of Mr. Kingsley and that of the Illinois Bureau of Labor convey the impression that sweating is a more or less distinct system of employment or labor, inseparably connected with the sub-contract system in the garment-making industries. That of the committee of the House of Lords and that of Col. Wright imply rather that it is the condition under which the poorer, unskilled, less efficient or more helpless workers in almost any occupation are employed.

While both ideas may be correct, the latter is broader and comes nearer to covering the sense in which the term sweating is mostly used today.

Taken both together, these definitions both define and describe the sweating system. Sweating in its broad sense is not of recent development. In this country the conditions peculiar to it can be traced back almost to the end of the civil war. It is not, however, an American institution, nor is it an outgrowth of the factory system. The conditions described existed in Europe before the United States had become a manufacturing nation, and before machinery and steam were applied to production. That is, there was sweating before the factory system was ushered in. In fact, sweating is a remnant of the eighteenth century, and of the system of production which preceded the factory system. Before the use of steam and machinery, most articles were made by hand in the small shop or home. The small master and journeyman workers were then the producers. Machinery and steam power coming into vogue in the latter part of the last century, changed all this. Man, with the assistance of these forces, could turn out more goods at the same or even at a lower price than the home worker could when aided only by his tools. The result was speedy and definite. The making of goods of almost every sort was taken into the factories which shortly began to spring up on every hand. The master and journeyman, thus deprived of their former mode of livelihood, became factory operatives. This change occurred in every industry in which machinery cheapened the cost of production. Generally speaking, man alone can not successfully compete with man when aided by a machine, and so the small shops went out of existence and work was taken away from the homes. There were exceptions, however, to even this phase of industrial evolution, for in a few industries work is still largely done under the methods of a hundred years ago and it is in these that sweating is oftenest found.

While the sweating system is a relic of the eighteenth century master and journeyman plan, it differs from it in many ways. It is true that in both cases the work is largely performed by hand and usually in small shops or in homes. It is also true .

the piece-price method is common to both, but here the resemblance ends. The master and journeyman method was general while the sweating system is confined largely to a few trades and its workers are drawn from the crowded population of large cities. In the former system competition was limited sometimes through the guilds, sometimes by common consent; in the latter, competition is absolutely unrestricted, and its fearful results are therefore more felt. The small master was also a dealer as well as a worker, and the journeymen labored more leisurely than the sweat-shop worker does today, while on the whole he enjoyed a much higher social standing. These are only a few of the points in which the two differ.

As intimated, sweating is neither an American institution nor an outgrowth of the factory system, though it is nevertheless true that it exists, to a considerable extent, in many of the larger cities of the United States. The question then arises as to how an evil not peculiar to our institutions has come to be a part of our industrial and social life. It is not difficult to find the cause. The sweating system is an importation from Eastern and Southern Europe where the old hand-labor, home-shop method of production is still in vogue. Immigrants from these lands know of no other method, and arriving in this country are ready to continue their former mode of living and working and find nothing strange in doing so. Other forces have aggregated the sweating evil, to be sure, but it was immigration of this sort which furnished the first and the real conditions for its growth.

A FEW FACTS IN THE HISTORY OF SWEATING.

The term "sweating" is quite old and has been used in different ways. The records are not quite clear on this point, but it would appear that the term was first used in the tailoring trades, the very industry in which the evil is most common today. At some time in the past it was evidently the custom of tailoring firms to have all their work done in their own shops. Not only was the stock kept and the cutting done there, but the sewers worked under the same roof. This condition of things did not continue however. The masters soon discovered they could save rent and profit in other ways by having part of their work "let

out" to tailors who were willing to work in their homes, and gradually this became the general practice. These homemakers were paid by the piece and in order to earn more they often worked inordinately long hours. Tailors who still worked regular hours in the larger shops took the matter up, and, in the discussions that followed, termed the homemakers "sweaters"—that is, persons who sweated themselves for the sake of the extra earning. Before long the term was applied in still another sense. Tailors who took work home soon found that they could obtain more work than they themselves were able to do. This brought about a new order of things. At first the tailors pressed their families into service, then they hired other tailors to assist them. From workmen they were now advanced to and became small masters and began to "sweat" others as well as themselves. They became in short middlemen, or contractors, who took work from the wholesalers, saw to it that it was made up, acted as overseers as well, and were held responsible for it all until the garments were returned. To these contractors the term "sweaters" was then applied, and they are still known by the name.

Aside from these special applications the term "sweater" also gained a wider and more general meaning. The long hours in the tailors' garret were attended by other evils such as low wages, unsanitary surroundings and irregular employment and with these the term became and still continues to be associated. There are many examples of this. Trade unions, for instance, often apply the term to employers who pay less than the ruling wage. Social workers apply it to the unhealthy conditions which surround the workers in many of the sweated occupations. Others again apply it to cases where the hours of work are longer than usual, and where other bad conditions exist. In fact, the word is made to describe the condition of all overworked, underpaid, ill-housed and generally oppressed workers no matter where they are found. Though it is oftenest used in reference to the class in the congested portions of the larger cities.

It is the bad effect of such conditions on the workers that makes them so great a social evil. Long hours, low wages, and unsanitary conditions of employment result not only in poor workers

but, in the end, in poorly made goods. Long hours are bad because they reduce the physical and mental energy of the worker, leaving no time for rest or recreation or the self improvement that might otherwise be possible. No person or race can be taxed constantly to the limit of strength without serious results both to themselves and their descendants. When long hours are associated with low wages, as is generally the case, the situation is made worse. The standard of life is lowered and the efficiency of the workers is seriously impaired. Development and progress of the individual and consequently of society are retarded, and a class of poor and even dangerous citizens is formed. In a republic where all men have a right to vote, this last is not the least of the dangers enumerated.

Unsanitary conditions in workshops or homes where sweating is carried on are dangerous not only to those directly involved but to the community at large. Such places are not infrequently the breeders of disease, the starting point of many a seemingly mysterious epidemic. Diseases of an infectious nature, breaking out in such a place, may spread either through direct contact with the workers or through garments or other articles sent out from it. The workers coming from a home where there is a case of infectious disease may bring the germs to their fellows in the shop. The little child too young to be placed at work may carry the disease to school with him exposing other children and threatening the health of many families. Goods sent out from an infected shop may be exposed for sale with an utter regardlessness of the conditions under which they were manufactured. Instances of all these things are numerous in any community where sweating exists, though the public is not usually cognizant of them. They should demonstrate conclusively to every one the necessity of a wise regulation of those industries that foster them.

As has been said, sweating is often associated with contract work and the small master. This master usually contracts with a wholesaler or other dealer to perform a certain amount of work for a certain price. He then brings this work to his own shop or to his home where it is made up through the help of workers employed by him. The difference between the price he receives and

the amount he pays out to his workers is the compensation he receives for his time and efforts. In some cases, this difference is considerable and leaves him a fair profit. In other cases, and these seem to be the most numerous, his profit is less than the earnings of his best workers. In many instances, this small contractor has no shop, but simply sublets the work to others who take it to their home where it is made up by their families or perhaps by still other hired persons. Here the contractor is not the real employer. He simply takes the work at one price and lets it out at another and then sees to it that the goods are properly returned when made up. In all cases he is responsible for the work from the time the material leaves the wholesaler until the articles made from it are returned to the latter.

But why does the dealer have his work done through a middleman instead of employing the workers directly? The answer to this is not always easily found. In most cases, however, it is a question of economy and convenience. In the first place, such a method relieves the dealer from furnishing and maintaining a shop. Since the work is done in the homes or cheap shops and the contractor, and consequently the workers, are ground down to the lowest possible figure, this may be a matter of some economy to the dealer. Then again to find workers and manage a shop is a task that many like to leave to others. To engage workers who will take the material home and also see to its distribution and the collection of the completed work entails less trouble and effort. Figuring up everything, it is quite likely that it would cost the dealer a great deal more to have the work done in his shop or to personally distribute it among the workers than to leave all this to the contractor.

The contract system thus seems to favor both cheapness and convenience. In point of cheapness the margin may be even greater than would at first appear. It is not at all likely that public opinion would permit a well known house to hire workers in a big shop on the same terms as those at which the home workers, who are out of the public eye, may be employed by a contractor. If the dealer established a shop in connection with his business this shop would have to be conducted on the same advanced plan as that followed in other large factories. If he

hired the home and small shop workers directly and it became known that he sweated them to the same extent that he is often able to do through his contractors he might soon feel the effect upon his business. The contractor is, therefore, a sort of a go-between, a medium through which, if skillfully managed, the cost of production may be kept down. He is thus an exceedingly useful person. There are many dealers in clothing, however, who let their work directly to the home worker. In such cases the workers fetch the goods directly from the dealer's warehouse and return the garments after they have been made up in their homes. It has been observed, however, that this method results in no better terms to the workers, than when a contractor is employed.

In its worst forms sweating is usually found in the congested districts of the larger cities. Here the poorer people live, sleep, eat and work in the same room. In the worst tenement districts the shop cannot be distinguished from the home. In other occupations and in other localities sweated individuals may be found but in the tenements there exists the sweated class. Here it is that the real sweatshop is located, and here it is that the sweater finds his recruits. In other places, one or another symptom of sweating may be discovered, but here all phases of the evil are present. Not only are the earnings at the lowest point possible for the work to go on, but the hours are extremely long and the sanitary conditions often beyond belief. It is the squalor in these places that has attracted so much attention to them and that makes them so important a problem. People cannot live under such conditions and be temperate and moral. Such qualities want more space, better food, longer rest and more sunshine, and greater cleanliness. It is a crime on the part of society to do nothing toward wiping out this evil, especially in those places where it has appeared in its worst form.

Sweating is also associated with the small work shop and home laborer. This is owing to lack of machinery on any large scale in these places and to the nature of the work itself which is such that it can be easily subdivided and distributed. Cloth, for instance, which is cut for garments, can be taken almost anywhere to be made up. The workers can obtain it either from the contractor, or from the dealer, take it home, make it up, and return the gar-

ment either partly or wholly finished. There are of course only a few industries in which this can be done. Where machinery is used the material must be brought to the machine and when it is heavy it can neither be carried about nor readily subdivided. In such cases the work is done in special places and under the public eye. In a few trades, however, it is often done in the home or small shop, away from public view, and under conditions that can only become known through special investigations.

The height of the sweating evil is surely reached under the so-called "task system" in which a contractor agrees with his workers that they shall consider a certain task a day's work. He then solicits work upon that basis. It is easy to see to what abuses this system may lead. In dull times, or, when there is a depression in business, the tasks are often increased until the workers have to toil perhaps two or three days for one day's wage. When it is remembered how small the sweated wages are, even at the best, it is not difficult to understand what this must mean. Bad as it is, the task system has not been uncommon in the eastern cities of this country. It has even been found that in some cases there has been a combination between contractor and wholesaler for the purpose of increasing the tasks. A more vicious combination could hardly be thought of. In other cases again the task system has been used by individual contractors for the sole purpose of underbidding others. This is certainly competition with a vengeance.

The sweated workers are almost invariably unskilled, poor and powerless to better themselves. A large proportion of them are immigrants from eastern and southern Europe, people ill fitted for the operation of high class machinery and for modern factory life. The sweatshop is nothing new to them. Many of them have been accustomed to similiar conditions of work elsewhere and they adapt themselves to circumstances here with but little protest. There is little else for them to do. They know how to do only one thing and their livelihood depends upon finding that thing to do. The work is all done by hand and is greatly subdivided so that one worker performs but an insignificant part of the whole, but though it is not work that requires any great skill it is usually the only thing that he is able to do and he therefore

accepts employment at it at any price and under any conditions. The supply of workers is always far in advance of the demand for them and if he is not willing to make concessions and endure hardships he must give way to someone who will. Consequently, without outside aid he can do little to bring about a change for the better either in wages, hours of employment or sanitary conditions.

There are few occupations in which there is not someone who must contend with one or more of the evils cited. The oppressed are everywhere. It is true that in some occupations only a few have any real hardships to bear but in others almost the entire body of workers is affected. Perhaps no class suffers so much as the garment workers, who live and work in the tenement districts of the large cities. They are often helpless and inefficient, while their work is of a peculiar nature, requiring little or no machinery and capable of such subdivision that it can easily be carried to the home and made up there. It requires little skill and consequently it is eagerly sought by the immigrant class and by women and children who must support themselves and who see no other way of doing so. Such workers, driven by necessity, will work on any terms. Their position is isolated and few of them have come under the influence of the trades union. So far, too, they have practically been beyond the reach of every other force that makes for better conditions. Even factory legislation and inspection have failed to effectively include them because of the prevailing but false view "that every man's home is his castle."

What has so far been said of sweating applies in a general way to the evil wherever and however it is found. In some places all the symptoms may be present. In others only a portion of them may be detected.

WHO IS THE SWEATER ?

Since there is sweating there must be a sweater,—some one who is really responsible for the fact that people are forced to work under such bad conditions, and for such meagre earnings. So clearly apparent an effect must have a cause but to locate this is no easy matter for the further an analysis of all the facts bear-

ing upon the case is carried the more complex the situation becomes. In fact it soon develops that the underlying reasons for these conditions cannot be laid wholly at the door of any one person or class. The cause appears to be inherent. Every one in general seems more to blame than someone in particular.

The sub-contractor or the person who brings the work and workers together is usually charged with being the real sweater and he is often pictured as a gloating monster who thrives upon his fellow men if he does not actually devour them. But is this view well founded? Can he after all be justly blamed for the suffering and squalor that exist among those whom he employs? It is a question that has not received the attention that it deserves but a survey of the facts points to this, that in most cases the contractor is little if any more to blame than anyone else. He is nothing more or less than a middleman, serving the same purpose in his line that contractors do in other kinds of business. His position differs but little from that of the retailer. He serves his special purpose. Wherever employed he is found necessary. He brings work and worker together, directing the work and often overseeing all the details of it. In one way or another he works as hard as any of his employes. He performs services that have a definite and necessary place in the social system. He is also as much a victim of circumstances as anyone else. Competition acts upon him with just as much force as it does upon others and he therefore earns no more in proportion to the social value of his services than do his workers. In fact, his wages are often as low as those of his best paid hands. Of course, this does not make it impossible for the contractor to be oppressive in his methods and for the time being at least he may be overpaid. But such instances are rare. That, as a rule, the sub-contractor is not the real oppressor seems also to be confirmed by the fact that in cases where he has been done away with and where the workers deal directly with the wholesaler the situation is no better. In fact, the general verdict is that where this change has been made the condition of the workers often becomes worse than ever. The wholesaler now assumes the duties of the contractor, thereby saving the amount the latter earned, but it does not follow that this amount is added to the wages of the workers nor does it im-

ply that the terms of labor will be any better than they were before. On the contrary it has been proved frequently that the wholesaler can drive even harder bargains and is no more inclined to be merciful than was the contractor. All these facts go to show that the sub-contractor is not, as a rule, the real culprit. Indeed they seem to prove the contrary for when the sub-contractor sweats his workers it is usually because he is himself sweated and cannot do otherwise if he would remain in business.

But if the contractor is not always the real sweater who is? Many hold that he is to be found in the real employer, and since some of the worst cases of sweating exist where the workers are employed directly by the wholesaler there is good ground for that position. Upon a closer examination of the facts, however, it will be found necessary to modify this view also. Many of the dealers are unscrupulous and greedy and in all their transactions with their employes take full advantage of their superior position. They are often guilty of serious abuses, not only when they deal directly with the workers, but in indirect ways as well. Hard bargains usually result in a low cost of production. Those who can produce the cheapest can also sell at the lowest price. The employer who pays the lowest wages, requires the longest hours of work and provides the poorest accommodations for his workers is often able to undersell fair and honest employers in the market. In this way the unscrupulous bargainer forces all others in his line to adopt his methods or get out of business. That such employers are the real sweaters few will question. Another class of employers, who may be held morally responsible for the hardships they inflict upon the workers are those who, while enjoying special advantages, fail to share them with their employes. On the other hand, employers who are exposed to the full force of capitalistic competition cannot in many cases pay higher wages than they do without either lowering the margin of profit down to a point where capital would be withdrawn, or wiping it out altogether. A majority of employers are in this position. Many of them are doing all they can for the comfort and welfare of their workers. In fact, not a few go a great deal out of their way in order to attain this end. With these facts in mind, it is certainly clear that all employers should not be classed as sweaters.

The public which purchases and consumes the goods has also been regarded as the sweater. This may not at first seem quite clear, yet nevertheless the point is not ill taken. In fact, it is the most far seeing view of all. The people, it is said, demand cheap goods. In order to meet this demand producers are forced to reduce the cost of production which means lower wages and poor conditions and the sweating evil can thus be traced back to the general desire for low priced goods. There is more back of this view than appears at first glance. On the part of the purchasers there is certainly a strong and well defined demand for low prices but this is not entirely caused by a desire for cheapness in itself. In many cases the real reason will be found in an inability to distinguish between the goods that are relatively cheap or dear and between the good and the poor in quality and workmanship. The people have bought poor goods at high prices so often that they have become suspicious and conclude that the risk is less when the price is small so they buy accordingly. The art of adulteration and deception therefore comes to play an important part in this social demand.

Whatever the cause the fact remains that almost everyone is looking toward the bargain counter, and is stimulated in his purchasing by the show of low prices made there. That both dealer and producer should endeavor to meet this demand and take advantage of anything that will increase their sales is only natural. It is also easy to figure out what the effect of this upon wages and other conditions of work is likely to be. Business is carried on for profit. Neither consumers nor producers are willing to consider any other effect than what is to their immediate interest. What is to their ultimate advantage in most cases is entirely disregarded. So long as both consumers and producers as such are guided exclusively by the idea of gain and disregard entirely the social effect of their actions as well as the ethical principles involved the weaker classes have little hope of relief. Social evils such as sweating, can be completely wiped out through social actions only. Efforts of individuals or classes may be of some temporary assistance, but in the very nature of things they can not go to the root of the matter. In view of this it is not easy to escape the thought that the public, or society at large, is after all the real sweater.

SOME CAUSES OF SWEATING.

No one cause of sweating is perhaps more serious than the over-supply of poor and low-skilled labor, which is to be found in such quantity in the larger cities and which is recruited mostly from the immigrant class though women, children and unfortunate persons generally find place in it. All such workers are at a disadvantage at every turn of life, but the newly arrived immigrant is beset with special difficulties. In many of the countries of southern and eastern Europe, whence he comes, the old hand labor method of industry is still in vogue. Production is carried on in the small shop or in the home, and machinery and steam power are practically unknown. Industrial life follows along the ways of the ante-factory period, the methods in use being entirely different from those of western Europe and of the United States. Some of these countries lack even a fair public school system so that the common people have but little education. The result of all this is that natives of these countries, brought up under such conditions, have neither the skill nor the habits of life that fit them for factory work here. They are not adapted to it. Such trades as they may have learned belong to a past age and the modern factory does not desire their services since they can not operate the delicate and nicely adjusted machinery in use there. But the immigrant must live and therefore he must work. What shall he do? If he has the strength he may find irregular employment at common labor, but if he is weak and sickly he must find something else, something suited to his mental and physical equipment and something that may be quickly learned. Garment making offers such advantages and the immigrant takes to it naturally.

Women and children who, in their enforced pursuit of a livelihood, have joined this rank of workers are imposed upon to even a greater extent than is the immigrant. True, they know the language and the customs of the country, but they are hampered in many other ways. Many of the women are wives and mothers upon whom the burden of a family's support has fallen, or they are widows left with helpless children to rear, or unmarried women dependent solely upon their own exertions for support

and but poorly fitted for the task. Those with families find it impossible to leave them for any length of time and so take the kind of work that can be done in their homes. The children are in a still more pitiable condition. They are often weak and sickly. Their schooling has been limited and they have never had any of the advantages which most children enjoy. From the beginning their sordid little lives have been mere rounds of drudgery and want. Forced into work, they too take what comes easiest and lies closest at hand. The men among this class of workers, aside from the immigrants, are usually those who have lost work and health and often hope. They have been worsted in the battle of life and have given up the struggle. Sometimes they are cripples, handicapped for the race. Yet they too must live and so they take what they find, accepting such terms as their employer chooses to make, preferring that to either starvation or beggary.

It is from these varying classes of unfortunates that the so-called sweated ranks are recruited. They are the workers who receive the lowest wages, work the longest hours and suffer from the greatest abuses generally. The reason is plain enough. In the first place they are less efficient than the average worker and consequently are worth less to an employer. Then again, they are subjected to a fierce competition for places. There are always more workers than work in these trades for the work as a rule requires little skill and can be done by almost anyone. It is therefore sought by all such who are looking for employment. Such workers usually get the short end of the bargain because they are not in a position to hold out for a better one. They are not organized, organized action being foreign to them. If one of their number should refuse the conditions offered by the employer some one else would promptly accept them. In almost every respect they are at the mercy of circumstances. They are neither in a position to make a good bargain nor to refuse a poor one so long as there is enough wages coupled with it to ensure the barest living.

This is what unequal competition leads to. The strong can exact good terms, the weak and needy can not. There are many conditions in life where unrestricted competition is the very re-

verse of liberty, a fact which is being more and more generally recognized. What else can be the meaning of the constantly increasing demand for more restrictive legislation? What other reasons are there for the great combinations of capital on the one hand and labor on the other? In cut-throat competition the weaker side is doomed from the start. The weaker capitalist needs protection from those who are stronger and the result is a combination. The workers need protection from their own competition and hence form unions. Then these two forces clash. There is a struggle between capital on the one hand and labor on the other. In such struggles the weaker side ultimately gives way, and usually the weaker side is labor. The employment contract between capital and labor is the result of bargaining, and when it comes to bargaining power the workers, as a rule, are far inferior. This is true even when they are organized. It is this fact that has brought about legislation in favor of labor and the weaker classes, generally. Our present factory laws are simply efforts to limit competition and its injurious effects upon the workers. This is also the purpose of the trade union. Both are steps in the right direction and both have been the means of doing much good. Unfortunately, however, neither covers the whole field. The workers who have been described are not organized, and it is doubtful if they could act together if they were. They are too scattered and too needy to do so. Neither have they as yet derived much benefit from the enforcement of the factory acts, which seldom apply to the conditions that most vitally affect these people.

One of the most potent causes of sweating is to be found in the over-supply of cheap and needy labor arising largely from immigration. A constant stream of workers pouring into any country or place is bound to affect the supply. The increase of labor is then both natural and artificial, and it is only a question of time before the supply becomes greater than the demand. When that point is reached the pressure begins. The workers must have employment and in struggling to obtain it come into competition with other workers. One person will offer to work cheaper than another and that other will under bid him and so on until the effect on wages and conditions is such as to reduce the standard

for all. When a large proportion of these immigrants are of the inferior classes of workers the results are still worse.

The substitution of machinery for skilled hand work also tends to increase the supply of cheap labor, though it is true that in this case the increase is an indirect one. When a worker is thrown out of his trade by the adoption of a machine which makes all the skill that he had heretofore acquired useless he must look about him for something else to do. Unfortunately, in seeking employment his tendency is to drift downwards to inferior kinds of work and so he helps to increase the pressure at the bottom.

The existence of the sweating evil is also frequently attributed to the contract or small shop system. It is not difficult to understand why this should be the case. As shown before, sweating is always inseparably associated with the small contractor, the small shop and home labor and that a system including these should be looked upon as one of the causes of sweating is only natural. In considering the system in its several connections it becomes apparent that it is at least partly to blame.

The leading industrial tendencies of the age are plainly towards larger and larger units of production. In many industries the small shop disappeared long ago. In others it is being rapidly done away with. In only a few does the small producer seem to be able to hold his own successfully against the larger houses and the garment-making trade is one of these. In some manner this trade has managed to resist tendencies that have had a most powerful effect on all other lines of business and the question that naturally arises is as to the possibility of the small shop possessing certain economic advantages over the large one. Generally speaking, everything is in favor of production on a large scale. The big shop, as a rule, can produce at a lower cost and, if necessary, sell at a lower price than its small competitor. It is this that drives the little fellows out of business. But the sweated trades seem to be an exception to the rule. Apparently they enjoy economic advantages of a kind not peculiar to the big shop, and hence are able to continue in business, if not always to monopolize the trade.

The first of these apparent economic advantages is the fact that the smaller shops pay lower wages than the large ones.

They are able to do this because of the conditions under which they operate. They employ a lower grade of help; their hands are often helpless, ignorant, unorganized and with no knowledge of the labor market. In short, they are the very class of workers who must accept what is offered them. Besides this, such shops are usually hidden from sight and no one known much about them. Their proprietors are not subject to either the pressure of public opinion, which when aroused always exerts itself for fair conditions, nor to their employes' concerted demands for better terms. They thus may do pretty much as they please. Under such conditions the inevitable tendency is towards the minimum wage and wrong conditions generally.

The larger factories, on the other hand, are constantly before the public and the conditions in them become known. Their employes are also likely to be much more intelligent and are often well organized. Consequently the conditions which obtain in the so-called sweatshops would not be long tolerated in the larger factories.

Work in many of the sweated occupations depends upon the season, and in consequence of this is very irregular. Few offer steady work the year around, and this is one of the greatest drawbacks to the trade. For several reasons this irregularity is felt less by the small shop than by the large employer. The person who only employs a few hands and works in his home or in his living rooms has practically no plant to maintain, and little, if any rent to pay that can be charged against his business. When business is dull he may lose his own time, but that is about all. There is no direct expense piling up against him because of his plant. With the large employers, on the other hand, conditions are entirely different. They have large and costly buildings to maintain and a great deal of high priced machinery to keep up. They also as a rule pay large rentals. The plant and machinery depreciate almost as much when standing idle as when in operation and interest on the investment accumulates just the same whether the factory is running or not. Large factories can not remain idle even for short periods without incurring serious losses. As a rule, they must run or go under. High organization in order to succeed must be combined with regularity of

operation. This is an essential. Low organization, on the other hand, readily lends itself to irregularity. He who employs a few persons only and uses his living rooms as his workshop can stop work and turn his help out at any time without incurring any extra expense.

Most of the small employers in sweated occupations thus have neither extra interest, rent, or maintenance to meet when idle. Neither are they troubled by the demands of unions and can therefore pay lower wages and get along more cheaply than can the larger concerns. They can work as many hours as they please and disregard many things likely to involve some expense. Up to the present writing almost, they have been outside the jurisdiction of the factory inspector, or else, owing largely to the conditions under which they work they have successfully evaded the factory laws. This of course is another saving, for it should not be supposed that it costs nothing to fully comply with these regulations. Most of the items enumerated do not cut much of a figure when considered alone it is true, but when all of them are taken into account they constitute a distinct advantage which operates in favor of the small shop and the home worker.

The employers are often blamed for the existence of the sweating system. When they disregard their duties or take undue advantage of their superior strength in dealing with their employes this charge is likely to be true. There is no doubt but that the employers of today care less for the welfare of their employes than did those of the past, a fact undoubtedly due to the changed conditions of labor. With the development of the present industrial system the gulf between employer and employe has ever grown wider. Few enterprises are now managed directly by the owners. The business is conducted by managers and superintendents, persons of rare ability and grasp, but who are for all that simply hired masters. These persons do the actual work of organizing, and control not only the investment or capital of real owners but also labor itself. Upon them employment depends. The real owners have no direct voice in the matter. In most cases they do not even know the number employed, and certainly they rarely know anything about the actual conditions under which the work is done. It follows that there can be little of

that sympathy and considerate treatment of the more helpless workers which might mean the difference between suffering and comfort. The manager is responsible to the investors for the conduct of their business and wishes to make as good a showing as possible. He is actuated by purely business reasons only and he treats his hands as he does his capital. Their condition is likely to depend entirely upon the status of the market.

This was not always true. Under the old system the master and his journeymen worked together in the same shop. The master knew all about his workers. The mutual relations between them were much closer than now. The market they supplied was narrow but regular. The master was in position to regulate his business in such a way as to serve, at the same time, the best interests of both himself and his workers. Such conditions naturally tended to increase a sense of responsibility on the part of the masters. So far as employment is concerned its regularity also seems to have been greater under the old system than under the new.

On the whole, however, it is not likely that the workers themselves were so much better off then than they are now. The greater security of employment was, of course, an important matter, and the extent to which the close relation between master and worker contributed to this was of the greatest value. That this relation was advantageous in every other way is not so certain. If the master was harsh his continuous presence could only prove irritating. Both real and money wages were also lower then than now, and the hours of labor were longer. While the old system offered greater security to the workers, it is also true that it was fraught with many disadvantages.

The employer's lack of responsibility for the welfare of his workers is today largely offset by compulsory regulations. When, in the early days of the factory system, it was discovered that the employers shirked their responsibilities as such, the state, in its own interest, began to look about for a remedy. A long and bitter discussion followed. Various remedies were proposed. The contest finally ended by the enactment and fair trial of factory and liability laws, and the appointment of inspectors for their enforcement. The duties which the employ-

ers had and tried to evade were thus taught them by the state. So far as they go these laws have proved effective, but there are many evils which they fail to reach and it is certain that in many ways they should be extended.

Sweating is one of the evils that the state has so far done but little to efface or regulate, though its character is such as to make it a proper subject for state control. It has attracted wide attention, and it is certainly serious enough to demand some action. But so far only feeble efforts to cure this blemish on society have been made. We have noted the characteristics of this evil. They are precisely those which are likely to result from unrestricted competition between strong and unscrupulous employers on the one hand, and a weak, unorganized and helpless class of workers on the other. All the bad results of such competition are present, and they have been brought about through the operation of industrial and social forces. How much employers are to blame for this condition may be a question. To charge them with all the evil results of their failure to live up to their duties as employers may not be fair. Yet that they are at least partly the cause of much of the sweating that is done can not well be denied. Had the factory laws and inspection, at the very beginning of their service, been made to cover the small shop and home worker as well as the factory there would be little or no sweating today, for a free operation of those forces which make for this great evil would have been thoroughly checked long ere this.

The high rent in cities and the importation of goods made under sweated conditions elsewhere has also aggravated the sweating evil. It is a matter of observation that in cities where rents are high the poor live in wretched houses and under more crowded conditions than in places where rents are lower. Overcrowding is by many regarded as one of the worst features of sweating. The fact, however, that high rent is also a cause of the evil is not suggestive for it calls attention to one of the most effective of all the remedies proposed—that of providing better housing accommodations for the poor. Local and state administrations as well as philanthropists generally would do well to consider this idea.

The importation of goods which come into direct competition with goods made here also has a bad effect upon the trade, amounting practically to the same thing as the immigration of sweated labor. This proposition will probably be disputed. But no matter how treated there is no escape from its truth. Immigration of such labor increases the number of workers in the already overcrowded labor market. The importation of goods made under sweated conditions decreases the amount of work that must be done in the sweated trades. In either case the amount of work for each worker is decreased. This is the same as saying that it takes work away from the workers and causes more idleness.

REMEDIES FOR SWEATING.

An effort has been made to point out briefly just what the so-called sweating system really is, what class of workers are mostly affected by it and some of the reasons for its existence. As defined by the best investigators of the subject it has been shown that the term does not stand for any particular system of employment, but sums up the general conditions under which persons of little skill and efficiency and who are more or less powerless to contend with the world are forced to work; that the term "sweating" has come to stand for low wages, long hours and unsanitary work places; that usually it is associated with the sub-contract system, work in small shops and poor homes; that when the term was first used it was applied to piece workers in the tailoring trades who in order to earn more worked long hours, literally "sweating" themselves; that later the name "sweater" was applied to small contractors who "sweated" not only themselves but the people they hired to assist them. It has also been seen that while sweating may be found in almost any occupation the term is mostly used in connection with the garment-making trades; that the small contractor in these trades, who is commonly known as the sweater, is little more than a necessary and convenient middleman and that the real sweater is more likely to be found in the community at large. In seeking the causes of this evil it has been shown that they are to be found mostly in the over-supply of cheap labor; in certain eco-

conomic advantages which the small shop or home worker enjoys over the larger factories; in those employers who take advantage of their superior strength to drive hard bargains with their employes; in high rents; in immigration of cheap labor and in the importation of goods made under the sweated conditions.

This leads up to the pertinent question of remedies and the query arises as to whether a cure is possible or whether the evil is of such a nature that it can never be successfully effaced from society. Such questions have been widely and earnestly discussed both from the theoretical and practical standpoint. Many able investigators take a most pessimistic view of the situation, while others hopefully look forward to a solution through some of the various remedies that have been suggested and are now being tried. Everyone agrees that the problem is a complicated one not easy of solution and so far-reaching in its baneful results that the necessity of a reform must appeal to all who desire to alleviate the hardships of the poor. Social reformers have spent a great deal of thought, time and money in the hope of reaching a solution of the problem, and both national and state governments have adopted measures looking towards a control and regulation if not a complete wiping out of the thing itself. In both cases success as well as failures have attended well-meant efforts, yet it is safe to say that while the problem is still far from being solved much progress has been made. The experiments that have been carried on, whether successfully or not, have served a useful purpose since they have tended to lay bare the weak spots in the remedies proposed, while emphasizing their strong points. Moreover, in many cases actual benefits have accrued to the workers in the sweated trades. The chief result of such experiments so far, however, has been to indicate the remedies which are likely to prove most practical and effective.

One of the newest and most interesting attempts to handle the sweating problem has been through the organization of individuals into Consumers' leagues. Such organizations are made up for the most part of intelligent women of the better class of society who pledge themselves not to buy goods made under sweated conditions. In this way they hope to be able to reduce

the demand for such goods to the point where the makers will be compelled to either adopt decent methods or go out of business. In one sense, the aim of the Consumers' league may be regarded as an effort to repudiate the cheap and nasty. The purpose is certainly commendable and by persistent and well directed efforts much may actually be accomplished through such means, since while the methods of the league may appear simple they are really most complex. The task before it is, however, a big one for sweating is a peculiar evil and only the most radical means can do away with it.

A wise regulation of purchases implies a great deal. It presupposes, for one thing, that the purchaser shall know all about the article he buys. To carry such principles to a logical conclusion he should know exactly where and how each thing is made, and to make sure of no mistake he would be obliged to personally inform himself of the conditions under which the workers labored, the wages they received, the hours exacted of them and the treatment accorded them in general. Now if such goods were manufactured in only a few places it might be easy enough to do this, but such is not the case. The garments are made in various places and moreover are sent back and forth over the whole country and often beyond it, so that even the dealer rarely knows their starting point and would be unable to give any information as to the environment of the makers. Our industrial system has grown most complex and when all these facts are considered it will be seen how enormous is the task which the Consumers' league has undertaken.

Then again a rough test covering merely the quality and price of an article is often misleading. It sometimes happens that the finest and highest priced articles are made under the worst conditions and vice versa. Of this the lace industry affords many examples. Much of the cheaper lace is made by machinery in large, light, and well ventilated factories where the wages are comparatively high and the workers are provided with every comfort. A large proportion of the expensive lace, on the other hand, is made by hand in garrets under conditions which as to earnings and sanitation are as bad as they can well be. What is true of lace making is also true of many other industries.

To pay a high price for a thing is not in itself of much help. As things go there is no guaranty that the difference in price will in any way benefit the worker. This is plain from the way in which goods are placed upon the market. The retailer who offers them for sale buys them from the wholesaler. The wholesaler in turn buys them from the manufacturer who employs the real makers. Now the consumer buys from the retailer and any increase in the price would have to be paid to him. The question then arises as to whether the retailer, in the very nature of things, can be expected to pass over the bounty to the wholesaler and the wholesaler in turn to the manufacturer and he in turn to his workers. The chances that any such course would be followed are very remote. Under our competitive methods each one will pay only what he has to and charge what the market will stand. This may not be in accordance with the highest ethical principles but it certainly is the practice of the business world.

These are not all the obstacles in the way of the Consumers' league. There are many cases where practically all the goods of a certain kind on the market are made under conditions that the league would wish to repudiate either in part or as a whole. As a consequence the consumer is forced to buy the sweat shop goods or go without needed articles. Such instances are by no means rare. The makers of cheap goods are usually energetic, pushing business men who advertise liberally and in the end secure control of the market. They literally crowd out goods of the other class. Under such circumstances the consumers are often placed in a position where they cannot possibly carry out their good intentions. Then again the difficulty of telling cheap goods from dear has brought about many impositions and made buyers so suspicious that they often buy as cheap as they can, regardless of how the article may have been made. A large proportion of goods which are imported and some that are exported are also made under sweated conditions, and these the consumers cannot reach. These are only a few of the obstacles the consumer has to overcome when he endeavors to so regulate his purchases as to do away with sweating, but they are quite sufficient to show that he has no small task before him.

Regardless of all these drawbacks, however, the league has already proved its usefulness and power in the social field. Perhaps the most valuable work it has done so far has been of an educational nature, since through it more than through any other one source has public attention been called to the sweating evil. In fact, to its firm stand in this respect is largely due the growing sentiment against sweating, a sentiment that has led to many investigations through which the true situation is becoming known. This of itself is of vast importance. Actual knowledge must precede all intelligent action. Even public opinion can take no definite form without it, and deprived of the support of public opinion all efforts at reform must necessarily fail. The league has also exerted a strong influence upon social legislation both in this and other states, and has in one way or another materially aided the enforcement of the factory laws.

There are certain places, however, in which the league could work to special advantage. Mercantile and similar establishments offer a splendid opportunity for many of the reforms which the league has undertaken to bring about. Such places employ many women and children who are often underpaid and required to work excessively long hours. It is true that these stores come under the scope of the factory laws and are frequently visited by the inspectors, but this does not always imply that the conditions there are all that they should be. Moreover the law has little to do with the question of wages and hours and the factory inspectors are powerless to bring about any change in those respects. The members of the league, being purchasers, may however wield their power as such and do so with but little inconvenience to themselves. The stores are being constantly visited by members of the league who would find it easy to come into direct personal contact with the employes, thus definitely ascertaining the treatment accorded them. They could learn with but little trouble the scale of wages paid, the hours of work required, the number of seats placed behind the counters, the presence of child workers under the legal age, the imposition of fines and so on. Such facts are most important, yet they may be had for the asking and no trained investi-

gator is necessary to secure them. Considering everything, the mercantile establishment offers as fertile a field to such social workers as could be desired.

Another way in which it is proposed to do away with sweating is through organization of the workers in trades unions, not a new idea, by any means, since nearly every other occupation has its union. In most cases these unions have been of inestimable benefit to the members and to the trade concerned as well. In the skilled trades particularly the unions have been a decided success as they have often been instrumental not only in raising wages and shortening hours of labor but in improving many other conditions of employment. The chief reason for this is undoubtedly to be found in the fact that the supply of such skilled workers is of necessity somewhat limited. When the union or its representatives make a demand and threaten a strike if it is not granted the employer often is forced to choose between coming to terms or closing down as there are seldom enough workers outside the union to run the shops. In occupations where the supply of workers is always greater than the demand for help the success of such a plan has been less marked. The workers and their families must live and dare not hold out for better terms even when they may desire to do so. As the sweated workers come under this head of the unskilled it is easy to overestimate the value of organization among them, though there is no doubt but that something could be accomplished in such a way, as experience has shown that such organization as has been made among them so far has added greatly to their economic strength.

The advantages of organization come from the fact that it enables the workers to substitute collective for individual bargaining. In union there is strength. Unions enable workers to act together and to make joint demands upon their employers for better conditions. How much this means is plain from every point of view. The individual worker is seldom in a position to enforce even just demands, for there is always some one willing to take his place should he throw up his position. His employer can therefore do very much as he chooses. When a joint demand is made by a union, through those who represent

it, the situation takes on an entirely different aspect. In case all his hands quit work together an employer may, in time, be able to replace them with others, but this is not always an easy matter, and it can seldom be done without sacrifice. In the first place an entire change in the working staff is impossible without loss of much valuable time consequent upon breaking in a new force. Naturally most employers try to avoid this as well as the displeasure of the public and the consequent loss of business that not infrequently follow. These and other reasons are enough to make any employer pause before he incurs a strike. If business conditions are such that he can possibly afford to do so he is likely to compromise with his hands on some basis that will grant them at least a part of what they ask.

The unions are also of indirect value to their members by bringing the workers together, thus helping to remove them from their otherwise isolated position. The questions which come up for discussion at their meetings often give them new light and new ideas. They learn to know each other and to realize their wants. They are taught how to act together and how to stand together as well as the necessity for doing so. The unions, in short, have a direct educational value that tends to make not only better workers and bargainers, but better citizens.

The effective use of organization among sweatshop workers is shown by the experience in New York a few years ago. In 1891, encouraged, partly by favorable legislation and partly by agitation and other efforts, the more intelligent among the garment makers organized their fellow workers into a union. This seems to have been the first systematic attempt on the part of the garment makers in this country to do anything towards improving their own condition, and this was soon followed by other efforts. As time went on they began to press their claims for fair treatment. They first asked for an increase in wages, then for improvement in other conditions. This brought things to a crisis and resulted in the great strike of 1894, and though the strike took place in the time of an industrial depression important concessions were won. Among other things the strikers succeeded in having the task system abolished, and this of itself was a great gain.

The strike, which seems to have been led by the tailors, began about the time when the worst part of the financial crisis had passed, and when business in some measure had begun to revive. The commercial depression had been so disastrous to the garment workers that they bordered on pauperism, and special relief work for them had become necessary. The strike was caused by the workers demanding the doing away of the task system. They also asked for better wages, shorter hours, and the recognition of their union. To crush the task system, however, seems to have been their special object, and no wonder, for during the financial depression the employers had taken advantage of the situation and had so increased the tasks in size that the few who could find work had to toil both night and day to make the barest living. The struggle that followed was both long and fierce. The wholesalers would not give in. By playing the contractors one against the other they had succeeded in constantly increasing the size of the tasks, and they meant to keep the advantage they had gained. The contractors also held out for a long time, but were compelled to yield at last. An agreement was then consummated by which the task system was abolished, and nearly all the other points insisted upon by the strikers were granted. The task system had inspired the workers with such terror, and so fearful were they that the agreement on this point would not be lived up to that they required real estate bonds from the contractors as a guarantee of good faith. At the expiration of this agreement another, that was even more advantageous to the workers, was entered into.

These advantages accrued mostly to the tailors, but the garment workers also gained a few points. Through being organized, and by taking part in the strike they, in the first place, succeeded in having the working day shortened by three hours. This was an important concession and suggests very forcibly what the day must have been before the strike. The garment workers were also able to drive some of the worst contractors out of business. When it is remembered that some of these contractors resorted to practically any means in order to grind their workers down to the worst possible terms for them, and that in this they had the unqualified support of the wholesalers, it be-

comes apparent that even the gain was important. While many of those who worked in the smaller shops or in their homes were not directly benefited by the strike there were indirect advantages all around. The points gained helped to inspire hope and ambition in all, and this was really of greater value than the concessions themselves.

The secretary of the Garment Makers' union, from whose report of the strike most of these facts have been taken, also states that since the advantages won by the unions were general, the wholesalers were not greatly affected by the increased cost of production which the concessions otherwise might have entailed. The inference here, of course, is that the increased cost, if any, was offset by an increase in the price of the finished articles.

While subsequent strikes have been less successful the experience as a whole on this point goes to show that organized resistance against unjust impositions can be made most effective in improving the condition of the workers when real abuses exist.

To restrict immigration of those persons from whom the ranks of sweated workers are recruited would undoubtedly tend to relieve the situation to some extent at least. It would not, however, be easy to secure legislation upon this point. Objections of all kinds are made against such a claim, and while these are often based on self interest or false theories they are plausible and seem to carry conviction. The question, however, is a national one, and as yet is not strongly enough supported by public sentiment for congress to take any action. It is worth considering, however, whether this country could not accomplish more in the interest of civilization and the solution of the social problems by securing a higher standard of living for the people already here, than by trying to provide a home for all who may come to its shores. To restrict the importation of goods which come into direct competition with the products of sweat shops would also, of course, tend to help those who are immediately engaged in such work.

But valuable as these and other remedies that have been proposed undoubtedly are they are not likely to cover the entire ground nor to meet all the requirements of the case. Much more radical measures are necessary for the permanent efface-

ment of the sweating evil. So long as there is a class of workers who must accept whatever employment they can obtain in order to live and who are powerless to change the conditions they find in it, so long as factories operating under decent conditions find it impossible to compete in the cost of production with the small shop-keepers or home workers who pay low wages, require long hours and have few business expenses to meet, so long as men who transact all their other business under modern methods are permitted by this ancient system to exploit a helpless class and shirk their own responsibilities by hiding behind their contractors, must some remedy, more drastic and far reaching in its effects, be put into use if these things are to be abolished.

The contrast between the large and well conducted factory and the small shop is almost invariably in favor of the former. In the factory the workers receive the ruling scale of wages and work under conditions that are at least fair. In many establishments the environment is really more cleanly and sanitary than that in the homes of the workers. A working day longer than ten hours is almost unknown, and if the wages are low it is because wages in general are low, while it will usually be found that they are higher than those paid in the small shop doing the same line of business.

But this has not always been true of factory life. The first stages of the system were marked by abuses that stand as a blot on the industrial history of the world. Labor received barely a living wage and even the stipulated amount was often greatly reduced by fines and other methods of extortion. The length of the working day was almost past the point of human endurance and only those of the greatest vitality were able to meet its demands without over-fatigue. Fifteen and sixteen hours of work each day was the common lot and often it was longer, fixed only by the worker's limit of strength. Sanitary measures were practically unknown and modern appliances for ventilation, lighting and cleanliness were unheard of. Worst of all very young children were permitted to put in these long, hard, toilsome days for the merest pittance. The situation finally became so bad that the attention of the authorities was called to it and the thinking men of the nation declared that unless something

was done to better the condition of the factory hands the whole working class would deteriorate. The most bitter discussions followed before remedial legislation was finally passed.

But the modern factory system was not ushered in, fully matured. Mechanical inventions, upon which the factories depend for doing their work, are not perfected in a single night but are the result of a slow development. Yet though the factory plan only gradually made its way in the industrial world it came all too quickly for the workers. Someone always suffers in a period of transition, and while the factory plan was being established the workers were being forced to adjust themselves to new modes of life. Often they did this unwillingly. When the factory closed the doors of the master's little shop the workers were thrown out of employment. Often, following after the new work that was all that was offered them, they were forced to give up the homes in which they and their fathers before them had lived for many generations. They were confronted with new conditions of life and the adjustment entailed hardships and suffering the extent of which is difficult to realize at this time. Moreover, it was a long time before factory employers began to think of their responsibilities as such. For a third of a century after the doing away of the small shop and master method the conditions in the factories were fairly incredible. Women and children were driven into them and treated without the smallest consideration for decency and comfort. The workers were ground down and occupied a place second to the machines in the eyes of the owners. Their interests were absolutely disregarded and it was not until the passage of factory acts, protecting the workers from the rapacity and cruelty of their employers and insisting upon a strict observance of certain general regulations looking towards a happier day for the working class, did things begin to brighten.

The first factory legislation in history was passed in England. It began with a few unpretentious efforts to regulate the employment of children but it has gradually grown in scope until now it covers most of the conditions under which all kinds of factory work are done. Inspectors for the enforcement of these laws have been long employed and the result is seen in the well

regulated factory of the present day. The experience of the past three quarters of a century has conclusively demonstrated the value of factory laws and inspection. The benefits derived by society as a whole from these regulations are so great and apparent as to be no longer disputed. Even extreme individualists and followers of the old school of economics, who at one time were so loud in their denunciations of all efforts to regulate conditions of employment, have either become silent or have confessed that they were mistaken.

Through these laws and inspection factory life has been made safer and more endurable. They have required that dangerous machinery shall be guarded and the means of escape in case of fire or accident provided. They have also made the factory a comparatively healthy place to work in by insisting upon proper sanitary measures. A factory today must be clean and well ventilated, with a complete drainage or sewerage systems. Dust generating machinery must have exhaust fans and mechanical contrivances for carrying the dust away. What a change this has wrought! Today accidents are comparatively few. Formerly the proportion of the workers who were maimed or killed was extremely large. At one time every shop was a disease breeding place, reeking with filth and odor. Now there is, generally speaking, little ground for complaint on this score. Besides all this overwork is prevented by limiting the hours of labor for women and children. This fact is not the least in importance. The effect on society from this one thing alone is worth more than all the regulations themselves have cost.

Factory regulations have also promoted education by preventing the employment of children of school age. It is true as a general thing that if children are permitted to work they will be found in the factories, and, if prohibited from doing so, they will be sent to school. There are, of course, exceptions to this, but they are not so common as to affect the rule. That all children should have an opportunity for a proper physical as well as mental development is conceded by almost everyone, but this cannot be secured when they are forced to begin a life of drudgery at a tender age.

The factory regulations have also fostered a spirit of self help

and self respect and have promoted a higher standard of life among the workers. Such qualities are absolutely essential to all progress and whatever tends to promote them contributes to the general advancement of the human race. When the factory laws were first enacted the conditions of work were so bad that the workers had practically given up all hope of anything better. They were filled with despair, and imbued with a hatred of those whose lot was more fortunate. As through the enforcement of these laws their condition improved hope revived. They began to see that improvement was possible and from this on took steps towards doing something for themselves. It was the incentive under which they began to form unions and to learn how to act together in their demands for yet better conditions, more and better factory laws, and more frequent as well as more thorough inspection. In every way the effect of factory legislation upon the working classes was greater than is generally realized.

In the beginning the conditions in the factories were as bad if not worse than those in the modern sweatshop. With the enactment of factory laws and inspection these conditions had to give way to better ones, and they have kept on improving as the laws have grown stronger and have been more completely enforced. In factories which now come under the factory and inspection laws things are so much better than when there were no such laws that there is no longer any question as to the efficacy of similar measures as a remedy for the sweating evil. Legislation and inspection have practically abolished the sweating evil in factories and such other places of employment as come under their jurisdiction, and it is reasonably safe to conclude that what has been accomplished in those industries that are carried on within factory walls and by machinery may also be brought about in those trades where the hand is still the chief instrument. If state interference has improved conditions in the factory it is safe to suppose that it will do the same in the sweatshop. The sweater, to be sure, is elusive and his shop is generally hidden from public view. It cannot be reached by the regular factory laws and consequently but little is known about it. But this is no argument against state interference as a rem-

edy for the evils it engenders. A law can be framed so as to cover such places and special inspectors can be detailed to see that such legislation is properly enforced. Experience has shown that the sweater can be reached quite as well as the factory owner.

Another point to be considered is the responsibility of the owner of the property on which the sweatshop stands. The landlord should not be allowed to escape his share of blame and he should be held strictly to account for the condition of his property. As a general thing it can be said that the work rooms and living rooms in such a shop should be entirely separated. People should not be permitted to work in the place where they live. No building or room should be used as a workshop unless it is in proper sanitary condition, nor should overcrowding be allowed. These and other conditions can be regulated by law. Landlords who violated such provisions should be fined or their rent confiscated. Such regulations are perfectly proper and can be enforced as readily as the factory laws and by the same inspectors. With these and similar provisions incorporated into the factory acts, and with these acts so extended as to include the small shop and the home as well as the factory, the sweater could be made to feel very uncomfortable to say the least.

Factory and workshop acts are often said to be failures, and the reason for this is attributed to the fact that those whose business it is to enforce these laws fail to do their duty. While there is a great deal of exaggeration about this, it is unfortunately true that these statements have not always been made without cause. Factory inspectors are no more likely to be perfect than persons in other walks of life. Sometimes they are negligent of duty and careless in their work, and it is not too much to say that they have often accomplished little or nothing. This condition of things, however, is not the rule, and it is well that it is not, for without an efficient system of inspection the factory acts might as well never have been enacted. Such laws are simply police regulations and, as in the case of all regulations of the kind, there is a tendency to disregard them. In every locality there can always be found the reckless person who for

the sake of a temporary advantage will endeavor to evade factory as well as other laws. The effect of this is to either incite or force others to follow in the same course, as most people are inclined to look more to that which is to their immediate interest than to that which is to their ultimate good. It is this that makes factory legislation and inspection necessary. Indeed, the tendency to do what these laws forbid is so strong that it can only be prevented by a sufficient number of the most careful and vigilant inspectors. When an inspection service is poor the factory laws will be of comparatively little use, but with an honest and efficient inspection force these regulations are the greatest remedial force for certain social evils that has so far been tried. Everything, however, depends upon the methods of inspection.

Failure on the part of the factory inspectors to properly enforce the laws may be due to lack of interest in the work, political influence, the lack of a sufficient number of inspectors, general incompetency, and to shirking of duty. Most of these causes would properly come under incompetency or shirking, but for the sake of convenience they will be considered separately.

The work of enforcing the factory laws is of a reformatory nature, and thus differs greatly from the common conception of police duties. To be a really good inspector one should possess the temperament of a reformer, and be a student of economic and social conditions. Both by habit and inclination the inspector should be an investigator. He should be imbued with an honest desire to perform his duties in such a way as to do the most good to all concerned. Without these qualities no inspector can take a real interest in his work, and without the right kind of interest in it he cannot do his best. To these qualities must of course be added fair intelligence and a fund of common sense. Persons who fail as inspectors are almost certain to lack the right kind of a temperament for the work.

Political influences often lie in the way of the best work of an inspector. In enforcing the laws requiring protection from dangerous machinery, bad sanitation or other conditions the inspectors are likely to incur the displeasure of the proprietors or

owners who are often politically powerful. Not only do they sometimes wield a strong local influence, but their power is far-reaching and they may make or unmake appointments. Such considerations as these are likely to affect even the best of inspectors. Again, in enforcing the child labor laws the inspector may offend not only the employers, but the parents and friends of the children affected. This is another awkward situation, for these people control votes and often give vent to their feelings at the ballot box. Both employer and employe can also set other influences to work that are likely to operate against the interest of the inspectors. In the face of all this it is not so strange after all that even good and honest inspectors should often stop and count the cost before they proceed against many of those who are violating the laws.

In many cases the inspection service is a partial failure because the inspectors provided for are too few in number for the amount of work they have to do. When this is the case the blame should not be laid on the inspectors, but on the state. Like many other laws the factory acts are constantly violated in one place or another. In order to prevent even a proportion of these violations it is necessary for the inspectors to be on hand practically all the time. With industries of all kinds scattered over an entire state, and with an inspection force consisting of a few persons, the problem of being omnipresent is not an easy one. To build up an efficient inspection department is slow work. It has been accomplished, however, in many of the eastern states, but as yet few of the western states have as many inspectors as are needed, though many are constantly increasing their staffs so that the time is not far distant when all manufacturing states will be in position to enforce their factory laws.

General incompetency on the part of the inspector would, of course, be a complete barrier to the enforcement of the factory laws. It sometimes happens that persons entrusted with these duties ought in the interest of the service to be left in some other field. In states where several inspectors are employed the danger from this is not so great, for while some of the persons so selected may not be exactly the ideal choice for the position, it is more than likely that a part of them will be up to, and per-

haps above, the average of the qualifications required. It is true that since so much depends upon the inspectors, the utmost care ought to be exercised in their selection, yet those who are best fitted for the work can usually be had. In this, as in most other branches of the public service, and in private employment too for that matter, average results are really as much as can be expected in the long run. Incompetent inspectors can always be removed and there are plenty of ways in which to get good service from the others.

Those who deliberately shirk their duties are apt to cause as much harm as any. General report would have it that this class is numerous and difficult to deal with, but the proportion of those who evade their duties is not so large as is commonly thought. As a rule, those who hold public positions are charged with much more than they are guilty of, though it is true that shirking is no uncommon thing, either in office or out of it. Those who neglect their duties are everywhere out of place, and the sooner they are dismissed the better. In public office the temptation to shirk is perhaps greater than elsewhere. In the first place the tenure is short and efficiency and close application to work is seldom an aid to promotion. It is often known that the position will end with the term no matter how well the work has been done. Public office thus offers little or no encouragement for good work, and many see no reason why they should do more than is absolutely necessary to hold their positions until the end of the term. Then again, the duties of the public service are generally believed to be less arduous than in private employment, and the effect of this is detrimental. Especially is this so when applied without discrimination. It imbues many with the feeling that there is no use of working when one gets no credit for it. Supervision in public service is also likely to be less strict while the working day is shorter. This gives those who are so disposed an opportunity to take unfair advantages of the situation. Last of all, many inspectors are by their temperament ill-suited for their duties, and others again yield to political pressure, or to the fear of making enemies. These are only a few of the reasons that often contribute to slackness in the public service, but they are enough to show some of the tendencies of official life.

From what has been said it should not be understood that all factory inspectors are dishonest, shirkers of duty, or unfitted for their places. To believe this would be doing a gross injustice. A large proportion of inspectors are both competent and faithful and take special pride in doing effective work. It is doubtful if the exceptions are more numerous, comparatively speaking, in this service, than in private enterprises. After all, the inspection service is about what the public makes it. In places where public sentiment strongly favors a strict enforcement of the factory laws the laws are generally obeyed. In places where public opinion is behind the times on this point the inspectors are apt to overlook a great many things.

The first essential to a complete enforcement of the factory laws is that they should be backed by a strong public opinion. This is so plain that to mention it sounds almost like a truism. When backed by such an opinion, however, the inspectors are almost certain to comply with their duties. The effect is even more far-reaching than this, for it extends even to the employer and property owner. Few can afford to incur the ill will of the public. Happily the general sentiment is in favor of factory legislation and its strict enforcement, and this is one of the best signs of the times.

There are also many semi-private agencies through which a favorable public opinion may not only be created, but the inspectors made to do their duty. Among these are Consumers' leagues, women's clubs and trade unions. The Consumers' league is particularly well adapted to such a mission as this. Not only does it agitate for just such reforms as the factory laws are designed to bring about, but the very purpose of the organization is identical with that of factory inspection. By controlling the purchases of its members the league is endeavoring to bring about decent conditions for the workers and thus protection for the purchaser as well. The factory laws aim at the same result by prescribing conditions and imposing penalties on those who fail to live up to the regulations placed upon employers of labor. The league has already succeeded in affecting to no inconsiderable extent the attitude of the public towards the question of better terms for the toilers in the

sweated industries and it would be easy to extend the scope of its work. In most states the factory laws cover practically everything for which the league is striving and by a strict enforcement of these laws its object would be gained without anything further being done. It is in helping such an enforcement through the means that it possesses that the Consumers' league and all similar organizations can be of the greatest assistance to the state. It can help, first of all, to create a public sentiment in favor of factory inspection and against impositions on the part of employers, and it can then make it its business to see that factory inspectors do their duties. This does not mean that the members of the league shall act as spies upon the inspector nor follow them about in their work. That would imply altogether too much trouble. The method proposed is much easier to carry out. All that is necessary would be to keep a watch on things in general and to report to the proper authorities any case of violation or neglect of the laws. This would not necessarily entail much work and but little trouble, while the moral effect would be out of all proportion to the effort involved. Not only would public sentiment be affected, but the inspectors would be stimulated to greater conscientiousness and they would be likely to be more on their guard in completely enforcing the laws. This would tend to bring about the very thing for which the league stands and for which, also, the factory laws were enacted.

What has been said of the Consumers' leagues applies with equal force to women's clubs, which though not always organized with a similar purpose in view, are more and more becoming concerned with such matters. Both these organizations wield a vast amount of influence which, properly directed, could not fail to have the best results in bringing about a better state of things for the working class, particularly in the sweated industries.

The various trades unions have a similar power for good. In some ways it even excels that of any other body. The members of these unions are employed just where the factory laws are most likely to be violated, and know by experience the nature, extent and danger of such violations. They can point out

what machines are dangerous and why, and are also usually able to suggest the best method of protection. They are also able to point out weak, dangerous and unhealthy spots about the factory or shop when these may have escaped the eye even of the best and sharpest inspector. Likewise they are likely to know the age of children who are working alongside them and can thus tell whether such children are under the factory age, even though they may be protected by papers signed by unscrupulous parents who think more of the earnings of their children than of their future. The workers are in position to give the inspectors, as well as the public, valuable pointers, though on the other hand they may not always be in a position to tell what they know. They may fear, and often with good reason, that dismissal will promptly follow should their employers discover that they had been the medium through which such information was given, and though there are ways of avoiding most of the risk in thus coming to the assistance of the authorities, they involve caution and some trouble. Yet where there is a will there is a way even in such a situation, and many an intelligent workman, knowing of violations of the law, has found a way in which to let a knowledge of such infractions come to the ears of the proper authorities without appearing in the matter publicly at all and with but small danger of ever being detected in doing what is manifestly his duty, however it may be misunderstood by his employer. Such disclosures have resulted often in bringing about improvements in the regime of the factory or workshop that have been of the greatest benefit to the people employed in it. Such commendable work can and should be greatly extended. It is to be hoped that as a body the workers will adhere to their rights and take a hand in seeing that the factory laws are properly enforced.

With good factory and sanitary laws, competent inspectors to enforce them, and the co-operation of the public, and especially of such voluntary organizations such as the Consumers' league, women's clubs, and trade unions there can be no question but that sweating can be stopped, other abuses done away with and fair conditions in general secured for the weaker classes. These are points which should be carefully considered, not only by such organizations, but by the public in general.

SWEATING IN WISCONSIN.

In the preceding pages an effort has been made to show how leading writers upon the subject have defined sweating, how the evil originated, and what are the symptoms by which it may usually be recognized. Since the word itself implies that there must be a sweater who can rightfully be held responsible, an attempt was made to point out the class upon which the blame rests most heavily. Brief mention was also made of the causes and the remedies for sweating, but there was no attempt to go into details or to present an extended discussion of the questions involved. Only the leading facts were touched upon, the purpose being to show what sweating is and thus to offer an explanation for the facts bearing upon this evil as it exists in this state. What will follow is the result of recent investigations carried on under the auspices of this department.

It has already been shown that the most aggravated forms of sweating invariably appear in the larger centers of population. New York, Chicago, Boston and Philadelphia are cities that may be cited as examples of this, the conditions existing in them being enough to conclusively demonstrate the bad results of unrestricted competition for work among the poorer classes of society. But it is also true that in many of the smaller cities of the country may be found exactly the conditions that make for sweating, though in many only the earliest symptoms of the evil may be detected now. One of these places is Milwaukee, where though sweating exists in only its mildest and least harmful form, the thing is there and is constantly gaining ground.

The fact that it has appeared at all has been deemed of enough significance to call for remedies that shall check it in its very beginning. Both in Milwaukee and elsewhere about the state students of social conditions have taken the matter up in the hope of gaining so early a control of the evil that there will never be any danger of its reaching the stage at which it flourishes in other places. At the suggestion of ex-Attorney General C. E. Estabrook of Milwaukee, Assemblyman Soltwedel of that city introduced, in the legislative session of 1899, a bill for a law which was designed to regulate and discourage the growth

of sweating. The bill was championed by both of these gentlemen and became a law before the end of the session. While its provisions affected regular work shops only, and therefore could not include the home worker with his family, it was timely and a long step in the right direction, as it reached places which before this had been subject to no legislation at all and which therefore had been allowed to operate as they saw fit, regardless of the effect of their course upon their workers and the public.

Among the more important provisions in this law were the following: No work room shall have any connection with rooms used for living or sleeping purposes, nor contain beds, bedding, or household utensils of any kind; it shall have separate entrance from the outside; it shall be well lighted, heated and ventilated, with air space of not less than 250 cubic feet to each worker. Proper closet facilities must be provided, and the closets, as well as the premises, shall be kept disinfected and clean. The work room shall also be painted or white-washed when necessary and be kept free from vermin and obnoxious odors.

The law was classed with the other factory laws of the state, and this bureau was charged with its enforcement. In compliance with this the bureau entered upon the work soon after the passage of the law, making its first inspection in the summer of 1899. The results of this inspection will be found in the report of this bureau for 1899 and 1900.

In making the inspection, 79 workshops and over 700 places where garments of one kind or another were made were discovered in Milwaukee. These 79 shops employed 1,050 persons at the time of the inspection, of whom 268, or 25.52 per cent., were males and 782, or 74.48 per cent., were females. There were thus over three females to one male worker. Of the total number 107, or over 10 per cent., were under 16 years of age, while 15, or less than one half of one per cent., were under 14 years of age. As no affidavits as to the age of those under 16 years of age had been obtained and kept on file and no child under 14 years had the requisite permit to work, these children were of course illegally employed. While many of the other provisions

in the factory and sweatshop laws were being violated in these shops the condition, as a whole, was not so bad as might have been expected, being, aside from a few features which are peculiar to the industry, little if any worse than that existing in small shops doing other kinds of work.

As the law affected only the small shops or places where others than immediate members of the family were employed, not a great deal of attention was given to the homes or the home workers. Enough homes were visited, however, to gain a fairly good idea of the conditions existing in them. In regard to the number employed in these homes it is perhaps fair to place it at about two persons to each home on the average. In some cases the whole family was at work, in others again only one member, mostly the mother. In other respects the conditions varied. Perhaps about 58 per cent. of the homes came within the ordinary sanitary requirements, while the remaining places were either in good, or fairly good, condition in almost every respect. Very few cases were found where things were so bad as they are in some of the larger cities.

During the last weeks of 1900 and the first part of 1901 another investigation was instituted. The purpose of this was to ascertain whether the conditions in the shops had improved, and what other changes had taken place since the first regular inspection. On the first point the results were quite gratifying. Many of the shops had been put into better shape, and there seemed to be a desire on the part of most of the proprietors to comply with the law. This does not mean that no violations were discovered during the second investigation, for many were found. But on the whole there was an improvement. In other respects the changes were limited, as will appear from the comparisons which follow:

Number of Workshops:—By workshops is here meant the places in which goods were made up, or manufactured through the employment of outside help, and which were exclusively utilized for this purpose. The places thus investigated numbered 79 at each inspection. In the number of places covered there was thus no variation between the first and second inspection. Considering the shifting nature of such places and also

the fact that the inspections were made fifteen months apart, it is rather peculiar that there should have been neither an increase nor decrease in the number of such shops during this period. The coincidence is somewhat singular, but it has absolutely no other significance than that it shows the number of places reached on each occasion. The number does not even include all such shops in Milwaukee, nor in all cases was it the same shop or the same proprietor that was visited. Every such place should have been reached, but the time was far too short for this. The proprietors of such shops, as a rule, move about a great deal, this being especially true of those who manufacture on only a small scale, and while many such changes had taken place in the interim between the two inspections, both the employing and producing capacity remained about the same. Hence the facts for the two cases may be fairly compared.

Number of Persons Employed:—The total number of employes in these places at the time of the last inspection was 1,177. Of these 284, or 24.13 per cent., were males and 893, or 75.87 per cent., were females. The average number of persons to each shop was about fifteen.

Of the total persons employed 78, or 6.63 per cent., were under 16 years of age, while 18, or 1.60 per cent., were under 14 years. Children between fourteen and sixteen years thus numbered sixty, while those under fourteen years numbered eighteen.

All but seventeen of the children had affidavits as to age on file with the employer, and all but eight of those under fourteen had the required permit. In all there were but twenty-five violations of the child labor law. Considering the circumstances this cannot be regarded as out of proportion when compared with the same conditions in other lines of employment.

A few comparisons between the number of persons employed at the two inspections may be interesting:

	Males.	Females.	Total.
Number employed at first inspection	268	782	1,050
Number employed at second inspection	284	893	1,177
Increase at second inspection	16	111	127

The first of these inspections was made during the early part of the fall of 1899, the second in December, 1900, and in January, 1901, or about fifteen months later. For most of the occupations included this time is perhaps as busy as any during the whole year. It is therefore likely that these figures are somewhat above the average employment in these places.

In comparing the above figures an all around increase for the last inspection may be noticed. The actual increase amounts to 16 males, 111 females, or a total of 127, or nearly 12 per cent. The statement that there is a rapid growth in the garment making industries in Milwaukee has been made again and again, and its truth seems to be in a measure borne out by these figures.

The proportion of females increased from 74.48 to 75.86 per cent., or a little less than one and one half of one per cent. This indicates a slow substitution of female for male labor. Owning, however, to the changing character of these industries this conclusion might perhaps be regarded as somewhat hasty. But whether it is justified or not the fact remains that the proportion of females is extremely large.

In the number of children employed the following changes took place:

	Under 14 years.	14 to 16 years.	Total.
First inspection	14	97	111
Second inspection	18	60	78
Increase or decrease	+ 4	- 37	- 33

+Increase. -Decrease.

There was a decrease from 111 to 78, or of 33 in the total number of children under 16 years. This decrease is gratifying, but is somewhat offset by an increase of 4 among those who were under 14 years. Most of those under 14, however, were employed on permits and these were good for limited periods only. Those without the necessary papers had been working but a short time, most of them only for a few days, and according to the stories told by the employers, in almost every case the preliminary steps towards obtaining the requisite papers had already been taken. The real object of keeping children out of

shops and factories is to afford them the opportunity for a proper physical and mental development of which they are undeniably robbed when set to work at an early age. The tendency among the working classes, however, is often to ignore the claims of the child and to set him to the task of earning money when he should be in school, and to correct such tendency certain legal restrictions have been made protecting those who may not protect themselves from the rapacity and short-sightedness of adults. It has been proved that such restrictions have had a most beneficial effect, though it can not be denied that so far they have not succeeded in entirely eliminating child labor. The criticism has been made that either the law is imperfect or the inspectors are not vigorous in the prosecution of their duties. It is quite true that few laws are perfect and few inspectors so vigilant as they might be, but it does not follow that child labor can not be wholly checked through such means. Past experience has proved the contrary. Wise laws and honest inspectors are quite sufficient to do away with both child labor and sweating, but the laws must be strong and the inspectors bent on doing their whole duty.

The difficulty of preventing violations of the law was amply shown in the investigations under discussion. While there was a lapse of fifteen months in the completion of the two inspections, some of the larger places were visited very often in that period, the last visit being made about ten weeks previous to the last of the two inspections. At that time several violations of the child labor law were found, but these were corrected and things in general set right, the employers being warned that future violations of the sort would be followed by prosecutions. Regardless of all this, however, in less than ten weeks afterwards the employers were discovered to be violating the law in every respect. Now what does that mean? Simply, that children can not be kept out of the factories and in the schools until the best and most complete system of inspection and truancy service has been established and the officers of these two branches of public service have found wise methods of working together. A less complete system of factory inspection doubtless does much good, and often may reduce the number of violations to

an extremely low figure, but it is not likely to prevent them altogether.

Kind of Goods Made:—The articles of wear which were made, in the 79 shops included here, consisted of overcoats, coats of all kinds, vests, pants, overalls, jumpers, cloaks, jackets, sweaters, stockings, shirts, etc. In some shops one of these classes of articles only were made, in others several. In order to obtain some idea of the number of shops and persons in each line, the following classification is given:

KIND OF GOODS MADE.	No shops.	PERSONS EMPLOYED.		
		Male.	Female.	Total.
Coats of all kinds.....	48	200	520	720
Pants, etc.	17	17	223	280
Vests, etc.	7	15	83	98
Other occupations	7	12	67	79
Totals	79	284	893	1,177

The preceding exhibit presents several important features. The first thing is the prominence of the coat makers. Here we find 48, or nearly 61 per cent., of the shops and 720, or over 61 per cent., of the persons employed. This occupation thus comprises nearly two-thirds not only of the shops but of the workers as well. The pants makers embrace over one-fifth of the shops and nearly one-fourth of the employees. The vest makers and those engaged in other occupations in the garment making trade are of less importance. Together they only include about 17 per cent. of the shops and about 15 per cent. of the persons employed.

Another feature of this table is the proportion of males and females in each of the occupations. In coat making the females constituted 72.23 per cent.; in pants making, 79.64 per cent.; in vest making, 84.70 per cent.; in the other occupations, 84.85 per cent., while for all the proportion of females was 75.87 per cent. of the total.

For Whom Made:—The garments were mostly made for local concerns, as a matter of fact almost entirely for two wholesale houses which furnished work for 92 per cent. of the shops and 91 per cent. of the workers. These houses were, therefore, the

real employers, though they acted through middlemen or contractors. They bought the material and saw to its cutting, making their own bargains with the contractors for the remainder of the work. The material was then turned over to the contractor to be made up and returned when finished. The distribution and sale of the completed garment was left wholly in the hands of the wholesale houses, which also furnished practically all the capital and assumed all the risk. By turning the work of manufacture over to contractors, they merely relieve themselves of the necessity of maintaining workshops of their own, with all the attendant worry of hiring and superintending workers.

The Proprietors of the Shops:—The proprietors of the shops undertake the actual manufacture of the garments, entering into contract with the wholesalers to do this at a certain price. They furnish the shop, hire the workers, pay their wages and return the garments when finished. They have nothing to do with the purchasing of the material or with the sale of the finished article, these things being done by others. This is what makes the difference between the proprietors of such shops and manufacturers in most other lines. The price for which the proprietors undertake the work is fixed at the time of making the bargain, and is usually at so much per piece or dozen. The whole transaction is a very simple one, the chief responsibility of the proprietor towards the wholesaler being for the quality of work done in his place and for the safe keeping of the goods while in his hands and the proper return of the garments when finished.

These proprietors are thus contractors in every sense of the word. They are not paid any fixed salary or wages, their compensation coming out of the difference between what they receive for the job and what they must pay out as wages to their workers, rent for the shop, and other expenses connected with operating their business. The conditions under which they operate, however, are more nearly fixed than is the case in most other lines of contracting. They simply attend to the actual labor of making up the garments. The material is furnished them, and the sale of the finished product is attended to by others. The risk they assume is, therefore, very small, and this

is reflected in their low profits. The capital needed is also small, much less in proportion to the amount of work done than in other lines of business. Those who are conducting the larger shops must, of course, be backed by enough capital to meet the rent and furnish a few machines and perhaps some mechanical power. Other expenses, such as fuel and perhaps light, must be met, but the amount to be allowed for depreciation of plant and interest in the investment is light. In many cases little more is required than will readily be advanced by the wholesalers. The proprietors of the smaller shop and those who work in their own homes require even less in the way of capital. Most of them, in fact, have none at all. They use little in the way of tools, and the work is performed in their living rooms. When the garment is finished it is brought back to the wholesaler, the pay obtained, and the responsibility of the contractor ends.

As a rule the contractor understands all parts of the work. Very often he is a person who began at the bottom and advanced through the ranks. He is thoroughly familiar with the details in every branch, and can assist in any place where help is needed. The importance of this should not be underestimated, since the work is so subdivided, and so few of the workers are familiar with all branches that the contractor is often the only one in the shop who knows all about it. Many of the contractors, indeed, work as hard, if not harder, than any of their employes, besides attending to all the over-seeing and management.

The contractors employ their help much as other employers do, going into the open market for it. The supply of such labor as they want is plentiful, most cases so much so that the contractors do not even need to go outside of their shop to find it. At most seasons of the year more applicants for work are turned away weekly than the entire number of persons employed. At least, this is the story told by one of the contractors. The workers are paid out of the contract price and the less they get the bigger is the contractor's margin. With a supply of workers greater than the demand it is easy to see to what this order of things may lead. Some of the workers are employed by the day, others by the piece. In most cases, however, they are paid

weekly. The rate whether by the day or piece, as will be seen later, is very low; in fact, it seems on the whole to be even lower than for factory workers in general. Help, too, is hired only as needed and no one is paid for any time during which he is not actually at work.

All the work, however, is not always done in contractors' shops. As said before, garment making is subdivided. Some workers, for instance, make only button holes. Others again sew on the buttons, while still others perform equally insignificant parts of the whole task. As much of this work can be done as well in one place as in another, the contractors often sub-let a part of it to individuals who take it to their homes for completion, returning the articles to the contractor and receiving their pay. This method is often more convenient, as well as cheaper, and is quite generally followed.

The contractors seem to hail from everywhere. Some were born in this country, others in eastern and southern Europe, and others still in other European countries. The greater proportion, however, were from eastern Europe, or descendants of people from these countries.

Who the Workers Are:—Much is heard first and last about the workers in the garment-making trade. They are described as working longer hours and for smaller wages than the people do in other trades. It is also asserted that they live in poorer homes, that their work is irregular and their mode of life out of harmony with that of the working class in general. In short, garment workers are said to live under sweated conditions as a usual thing and to be almost always foreigners of an inferior social grade, inefficient in skill and of comparatively low intelligence. While many of these statements are more or less true it is not easy to tell wherein the garment makers differ greatly from workers in other occupations. Most of them, it is true, come from the countries of that portion of Europe where hand labor is still the rule and factory work uncommon. A large proportion of their number are women and children and it must be admitted that many of them are unskilled, inefficient and helpless. But this is also true of other trades than garment making.

In both spirit and method the garment making trade as it is carried on is neither modern nor American in character. In all other lines of industry, except that of repairing, production is carried on on a large scale. The factory has supplanted the small shop and the machine, operated by steam, has taken the place of the tool, guided by the hand of the worker. This, on the whole, has tended to increase the amount of cheap products and has proved beneficial to humanity. But the garment making trade stands today just where it stood in the last century. Some changes have taken place in that period, no doubt, but they are few and unimportant and in general the industry has progressed but little, lagging far behind all others. Little machinery or mechanical power is required even today when most things are done by steam and electricity, and the work is still carried on in small shops and homes, when the tendency in every other line is to concentrate production in large factories. The contractors who hire the workers and superintend their labors neither furnish the material or sell the product, and all the workers themselves are required to do is to sew into garments the pieces of cloth that have been cut into shape before the contractor receives it. Moreover, even this work of sewing is greatly subdivided so that no one worker ever makes the whole of a garment. This no doubt increases the amount that can be made in a given time, but it is a distinct detriment to the worker as he has no way of advancing in his trade and is likely to remain inefficient and unskilled in everything except the very small part of the work that falls to his share.

The actual work can be done almost anywhere. It can be performed with as much facility in the home as in the shop. A sewing machine is practically the only tool needed and in many cases even this can not be used. The work also requires less physical strength than most other kinds, and thus offers opportunities to those who are weak and infirm, or who lack the necessary stamina to enter other occupations. In considering the peculiarities of this trade it is easy to see why it is over-crowded, why the earnings are small and other conditions bad. It is here that the effects of over-supply of poor labor are most strongly felt. The trade is one that strongly attracts certain classes of

workers. It is the place of refuge for immigrants from countries where factory conditions are unknown, and it absorbs many of those who are in a position where they must choose between starvation or accepting such work as they can get. It also affords employment to many who have neither had the time, means, opportunity or energy to learn a better trade. It is eagerly sought by poor women who must support themselves, and widows who have families besides themselves to look after and so must find work that can be done at home. Children are also employed not only in the homes, where they are made to assist the mother, or, perhaps, the father, but also in the regular workshop, for the proprietor, there as elsewhere, very often finds that child labor is cheap. While the trade thus harbors the more helpless classes, many able bodied and capable workers are to be found in it. Some of these are persons who have learned the tailoring trade in their native countries and who, upon arriving here, readily find work in the small shops, but as a rule such skilled workers ultimately drift into custom work where both the pay and other conditions compare favorably with those in other skilled trades.

Kind of Power Used:—At the last inspection the inspectors ascertained whether mechanical power was used in any of the shops. The inquiries resulted in showing that four of the shops had gas engines, one employed electricity, and that seventy-four used no power of a mechanical nature. This showing is significant. It tends very strongly to substantiate the fact that these places are merely workshops on the old plan, rather than factories in the sense in which the word is used today. It does not follow that garment making is not suited for factory production or for the manufacture by machinery in large establishments. There is plenty of evidence to the contrary to be found in those places where strikes and the enforcement of the factory laws have been directed at the evils connected with the smaller shops and tenement work.

Again, the facts indicate that mechanical power is not out of place in this industry. The shops which were equipped with gas or electricity were among larger ones. The very fact that mechanical power was used at all indicates that it is practicable.

That garments can be made with profit on a large scale in modern factories has also been shown by experience in some of the larger cities. During the past ten years some of these places have witnessed the slow transition from the shop to the factory. This transition was not voluntary by any means, but was forced by strikes, factory laws, and by public opinion. The change, however, is slow, and seemingly lacks the necessary stimulus. The reason for this tardiness can undoubtedly be found in some of our social conditions. In this country, at least, sweating is certainly the exception rather than the rule. It would be considered entirely out of the question at all were it not for a large class of workers who silently accept sweated conditions. No doubt most of them are forced to do so from necessity. Their character, training, habits and other circumstances unfit them for the well regulated and sometimes exacting duties of the large factory, as well as for factory life generally. Cut off from this they must look for work in other directions. Through the natural process of elimination they are finally located in the occupations that most nearly meet their capacity, where the least is demanded of them, if not in actual work, in discipline and regularity. It is this class of workers that makes the small shop possible and profitable. Remove the conditions under which they live and work and the small shop would soon be a thing of the past.

Kind of Buildings in which Shops Were Located:—The garment making shops are to be found in all sorts of buildings. Of the 79 shops included in the report, 26 were located in one story frame buildings, 13 in one story frame with basement, 33 in two story frame buildings, 2 in two story and basement buildings, 1 in an one story brick, 3 in two story brick buildings, and 1 in a three story frame building.

Of the workshops 10 were located in the basement, 3 in the basement and on first floor, 58 on the first floor entirely, 3 on the first and second floor, and 5 on the second floor.

These facts are important. They indicate for one thing that in Milwaukee the garment making industry is not intimately associated with the tenement house evil. Some consolation is to be found in this. One of the greatest evils in this in-

dustry is the crowded, ill-ventilated and unsanitary condition of the places, or rooms in which it is usually conducted. By far the greater part of the work, as it was done in Milwaukee, was carried on on the first floor of one or two story buildings. This of itself, in the absence of other evidence, would be enough to show that these houses were not tenement houses, which are ordinarily constructed on entirely different plans.

Milwaukee fortunately is not a city of tenements. Such buildings are to be found there but they are not so numerous as to constitute a source of danger in themselves. Milwaukee is essentially a city of homes. It has spread out considerably and now covers a great deal of territory. Every house, outside of the business section, stands alone, and, as a rule, is surrounded with plenty of ground, air and sunlight. There are, of course, exceptions to this, but it may be regarded as the rule. The advantages of individual homes as compared with the much derided tenement are many. It is true that a small house standing alone may not be much more attractive inside than a large and crowded tenement building. The rooms may be as small and no cleaner, and the conveniences as few as in the most crowded quarters of the largest cities. Still this would apply to the interior of the homes only. On the outside the conditions in the two cases differ entirely. The immediate surroundings of a tenement are usually as bad, if not worse, than the interior conditions. The alleys and streets are bad, and the air is contaminated by the stench of decaying garbage. Sunlight is often almost entirely shut out. This can hardly be the case when the dwellings of the workers stand alone and are surrounded by open ground. Even if the rooms and the conveniences of the home are far from what they should be, the situation is much relieved by sanitary conditions out of doors. During at least one half of the year the children can play in the open, and fresh air be had by simply opening doors and windows.

SANITARY CONDITIONS AND HOUSING.

Sanitary Condition: The sanitary condition of places where clothing and other garments are made is a subject about which a great deal has been heard. Social workers dwell upon it. In fact many of them regard it as the most important feature of the sweating evil. Legislatures are considering it and their position in the matter may be judged from the provisions in laws which have recently been enacted. It is probably not too much to say that to bring about better sanitary conditions in the small shop, and thus to protect society from the evil results of unhealthy work places is the real purpose of nearly all legislation upon this subject.

The subject is one of the first importance, whether the matter is looked upon from the point of view of those who are immediately affected or from that of the state or society as a whole. People who live in crowded and unhealthy places deteriorate physically, mentally and morally. The squalor and want with which they are surrounded not only sap their bodily and intellectual vigor, but deaden their moral sense, making them less and less able to maintain themselves and to bring up their families as they should.

As said before, the worst sanitary conditions are found in the larger cities, such as New York and Chicago, where the poor are huddled together in rows of tenements that are absolutely unfit for human habitation. In smaller cities, where the tenement is almost unknown, this problem is less pressing. The poor in these places may be no better off than the poor in large cities. Their standard of living may be no higher. They may be no cleaner, and their homes may be as filthy. Still, the atmosphere in which they live is much better and can not possibly have the deadening effect of the fully developed slum, where the dwellers in tenements have neither fresh air or sun, and where nothing but filth and squalor can be seen no matter in what direction one turns.

It is true that there are poor elsewhere than in tenements and slums and that they suffer no matter where they happen to be. In such herding places, however, they are sure to be found, and

it is there that they sink the deepest and endure the most. Poverty and suffering are made worse by similar environment. People who see nothing else and who have but vague ideas of anything better, are not likely to try hard to improve their condition. They have nothing to stimulate or encourage them to the putting forth of better efforts. They have no hope or ambition. All their better qualities have through the lives they lead, been stifled to at least a certain extent. Of course, there are exceptions to much of this, but they are fewer than could be desired. The tenement not only shelters but breeds poverty. Many of those forced to live within it have lost all hope and have virtually given up the struggle for anything but the most meager existence. Their self-respect and desire to better themselves are gone. These are qualities that are absolutely indispensable to progress and without them no reform is possible. Therefore, the chief concern is that they should be restored where lacking. The question as to how this can be done at once arises. Mere precepts and good advice are not enough and are not likely to be heeded if given. The appeal must be made to the sense rather than the understanding. Anything short of an actual change in the conditions themselves is not likely to have a lasting impression. The poor must be made to actually pass from a bad to a good environment before they will begin to really appreciate that there are things in the world worth working for.

The first step towards such an end is better housing for the poor. The extermination of the tenement house evil, wherever it exists, is a problem that all cities should take up for consideration and solution. Decent homes in decent neighborhoods are an essential to any reform work among the poor. Sunlight and fresh air must have access to every home if it is to shelter good and useful citizens. Decency must be enforced, by the law if in no other way. The old time tenement is a breeder of pestilence and misery and it should not be allowed to stand. So long as it is permitted the poor are not likely to find themselves much better off.

At first glance it may seem a question as to how the poor can ever afford to live in better homes, but experience in New York

and elsewhere shows that the model tenement is not an impossibility and that it can not only be built but that it can be made to pay, without demanding a higher rate of rent than that now paid for places that are unfit for human beings to live in. To condemn and tear down such structures will not therefore result in higher rents or in hardships anywhere except such few as may be incidental to the transitory period. On the other hand, more than any other one thing will good homes contribute to the lifting up of those who are now on the lowest round of the ladder of progress.

Happily this commonwealth has no city where a fully fledged tenement district may be found. Wisconsin ranks high as a manufacturing state and the wage-earner constitutes a large proportion of the population, but its industries are fairly well distributed throughout the state. Instead of one great manufacturing center there are several small ones and in these the conditions in regard to overcrowding are apt to be less severe. Milwaukee is, of course, a large city as well as an important manufacturing center, but even there the conditions as a whole are not so very bad. The city covers a wide territory. Its industries are scattered. It has a splendid street car service. Tenements are found there but not of the worst kind. The wage-earners live in separate houses, which, even though small and no more convenient or comfortable than similar homes in larger cities, have, as a rule, open surroundings and plenty of both air and light. The instances where the home is used for workshops as well as for living purposes are, as yet, comparatively few, though already the home-worker, as has been shown, constitutes in point of number a good sized and apparently growing class.

Some idea of the sanitary conditions in the seventy-nine regular workshops in Milwaukee where garments of one kind or another are made may be gathered from the following facts which show the condition in this respect with reference to the various provisions in the law.

In only three per cent. of the places was the work-room also used as living and sleeping rooms. Comparing this with the condition at the first inspection, as given in the last report, it will be noticed that there was no change either for the better or

the worse. While the proportion of violations was the same at both inspections, the places and proprietors affected were not. Those who were at fault the first time had made the necessary improvements. Those who were so at this inspection had lately entered business in new places.

Only about one per cent. of the shops were insufficiently lighted and heated.

In twenty per cent. of the places vermin or bad odors were discovered. In this respect conditions seemed to have grown worse since the first inspection. This is probably largely due to the fact that the last inspection was made after the cold weather had set in, when it had become necessary to close up the houses in order to keep out the cold.

Eight per cent. of the shops needed re-painting and white-washing as well as a general cleaning up.

The sanitary condition of the immediate surroundings of the shops was very good in eighteen per cent. of the places, in seventy-one per cent. it was good, and in eleven per cent. fair, or bordering upon a condition where the health officer might be expected to put in an appearance at almost any time.

In twenty-one per cent. of the shops the work-rooms were either by doors, windows or in some other way connected with living and sleeping rooms. This is somewhat of an improvement upon the condition in this respect at the first inspection.

Four per cent. of the shops could only be entered through living or bed rooms. In this respect there is also an improvement since the first inspection.

Twenty-one per cent. were in violation of the law which requires separate closets for males and females, while seven per cent. failed to regularly disinfect them.

These facts certainly indicate conditions that from a sanitary point of view are much better than those of similar workshops in most of the larger cities. In fact the workshops in the garment-making industries in Milwaukee compare fairly well with the smaller shops in other lines. It is true that the same standard of cleanliness can hardly be applied to the two cases and that therefore what might be regarded as good conditions in one might be held to be bad in the other. Garments or cloth of

any kind will absorb filth and disease much more readily than most other articles. Garments are also used in a way that exposes the owner or user to great danger from any contamination to which they have been exposed. Hence, from a sanitary point of view it is necessary that the places where they are made be kept absolutely free from filth and disease. This cannot be insisted upon too strongly. Any other condition is highly dangerous not only to those immediately interested but to the community as a whole. How many cases of diphtheria and other infectious diseases can be traced to the shop or home where some newly purchased garment was made! If the real facts in this respect were fully known to the public no such laxity in enforcing the sanitary laws as is now witnessed almost every day in our cities would be tolerated.

The description, in official reports and other publications, of how the poorest classes live in some of the larger cities is almost beyond belief. Page after page is filled with notes running somewhat after this fashion: No. ——. Two story frame occupied by two families. First floor store, three living rooms and stable. Thin boards between kitchen and stable. Kitchen door opens into stable. Horse two feet from kitchen door. Stable not clean and foul odor from same. House unfit for human habitation. This is only one of the many illustrations that might be produced. What is the result of this condition of things? It breeds disease and fearfully increases the death rate, a statement amply sustained by the following facts relating to New York city: In a population of about 255,000 less than one-eighth of one per cent. had bathrooms in the house in which they lived. Among these classes the death-rate of children under five years was 255 in a thousand, and the general death-rate 62 in a thousand. At the same time the general death-rate for the city at large was only about 20. The death-rate in the poorer districts is thus several times as great as that for the better, and even for the city as a whole when all classes are included. But what else can be expected? The old tumble-down, filth-soaked, dark, unventilated places where these people live, and which it is almost criminal to call homes, are merely death-traps of the worst kind.

It may be asked why the poor should choose to live in such places. The answer is simple. They live there simply because they have to. Their income is too small to enable them to rent better houses. They must have food and clothing as well as shelter, and what they earn is not enough to go around. In order to live at all they must be satisfied with the cheapest tenement. Comfortable homes rent at prices that are beyond the reach of the very poor. The landlord who might put his property into better shape does not always feel called upon to do so. Sometimes he is an absentee, who does not know how bad it is, and those who look after his property may be more interested in what they make out of it than in how the tenants fare. He may be aware that his property brings a greater net income in its present condition than it would if put in better shape, as the additional outlay might not even increase the gross income, and from his point of view would therefore be wasted. Philanthropic and humanitarian instincts stand a poor show when brought into conflict with greed. Or it may be that the landlord himself has not been accustomed to better conditions, and for this reason as well as because he is financially interested sees no cause for making improvements. It also sometimes happens that the landlord "stands in" with the powers that be and is allowed to have his own way in spite of both sanitary and building regulations, and those whose duty it is to enforce them.

While the housing problem is most insistent in large cities it is not peculiar to any particular state or country. It is felt wherever sanitary science has made any advance. It has also been thoroughly studied, for men who are experts in their line have given their best efforts to its solution. Much has also been accomplished in the way of providing better houses for the poor in many cities. Private as well as municipal efforts have been enlisted in this work, but while many people have been helped in this way there are others just as badly off who have not been reached at all. The field is too big for any but the best organized and most comprehensive social movement.

The efforts that have been made to bring about better sanitary conditions in homes, factories and workshops are of a most varied character. National, state and municipal governments

have taken a hand in the matter by instituting investigations, enacting laws and ordinances for the regulation of the sanitary conditions and the construction of buildings, and by providing inspectors for their enforcement. Private individuals and associations have also contributed by looking up and reporting upon conditions as well as by organizing and operating building companies. Such moves are along the right line, and if continued and enlarged they will be almost sure to bring the desired results.

The first step in all reform movements is a thorough investigation of all existing conditions. The local situation must be studied in detail. It is necessary to know what the trouble is before a remedy can be advanced. All such investigations should, moreover, be as complete as possible. There should be no guess work, nor anything visionary about them. Hard facts only are wanted. Before the true condition is known no safe remedy can be applied. The importance of such investigations has been generally recognized and several have been conducted by national, state, and municipal governments, as well as by private associations and persons. Many of them have been both fair and complete and often they have resulted in legislation and inspection that have proved timely and effective. Such investigations are not difficult to make as they can be carried out successfully by persons of ordinary talents and good hard common sense, if they are not afraid to work, and will take enough interest in it to do it as it ought to be done.

The reports of such investigations are of the greatest value. To police authorities they serve as a guide and their publication alone is often sufficient to bring about extensive reforms. No landlord likes to have the public know that his houses are unfit for habitation. It may injure his social standing and even hurt his business. Publicity is one of the great forces that work for public good. Sometimes a mere inspection of the premises is sufficient. Many landlords who will let the matter drift so long as they attract no notice take immediate steps to set things right when attention is called to the situation.

The landlords can, of course, do a great deal in this matter. They own the property and certainly have the power to see to

it that it is kept in a good sanitary condition. It is their duty to do this, and if they fulfilled their obligations in this respect there would be no housing problem. The landlords are also the persons to inform the health authorities when any of their tenants fail to keep within the bounds of propriety. Some do all that can be expected of them in this respect, but others violate every principle involved. Since filthy, poor and disease-breeding dwellings can be made to bring in as much rent as cleaner and more expensive ones it is perhaps too much to expect all landlords to keep their property in the best condition. Greed is a strong motive force, and human nature is full of imperfections. But there are other ways in which the property owners can do much. They can help to establish closer business relations between themselves and their tenants, by making fair contracts and seeing to it that the requirements of the same are promptly fulfilled. In short, they should get into close touch with their renters. There are many instances where a little effort in this direction has resulted beneficially to both sides. The landlords have found that their rent increases and the tenants have become inculcated with a few good business habits which, once started, have gradually strengthened and encouraged them until hope has taken the place of despair.

Those who desire to know what can be done in this way, either by the landlords themselves or by others who may have control of the property, have only to examine the work of Octavia Hill who, with the help of John Ruskin, secured control of some houses in London the inmates of which had a bad record for untidiness. She entered the work as a rent collector, and one of her principles was to require prompt payment of the rent. This before long established natural business relations between her and the tenants. Disobedient tenants she had, of course, and the power to eject but the power was kept in the background and replaced by friendly counsels as she discovered before long that no coercion was necessary. Those who took the best care of her property she found some way of rewarding, and those who were heedless and who neglected the premises had to wait for improvements or conveniences until after the others had been supplied. In this and other ways she not only transformed the houses but reformed the people who lived in them.

Such a method of social service is highly commendable and has been taken up more or less in this country. It is not always a pleasant task to spend a great deal of time in the tenement district, yet many who have leisure and money are doing it and with the best of results. Their accounts of what they have had to put up with as well as of what has actually been accomplished is not only interesting but highly instructive. No one can read these reports without learning a great deal about the "other half"—their desires and needs, how they live, who they are, what they do, or how they make their living—facts that are indispensable in all intelligent efforts to deal with the poor. Direct aid, such as is furnished by charity organizations, is not always the best thing that can be done. Such assistance has its place, but to help people to help themselves is usually the best for all concerned.

Private individuals and companies have contributed much to better housing accommodations for the poor. Employers, for instance, located in small places have often seen to it that their employes have been placed in a position to acquire modern houses on terms of payment that amount to little, if any, more than the ordinary rental asked in other places. The greater proportion of these efforts have proved successful and resulted in benefit to both sides. Many objections have of course been raised to the nature of the employment contract in such cases, and perhaps some of these objections have been well taken. This, however, is another question which does not belong here. The facts are, that joint undertakings of this kind, as a rule, mean comfortable living apartments and pleasant if not artistic surroundings.

In factory districts the housing problem is often of the greatest importance, and the question of a possible improvement there has caused much discussion. The American spirit is noted for its independence and anything that savors of paternalism is likely to be resented. Employers do not always take kindly to suggestions and the more intelligent workers hope some day to own their own homes and gardens. Both alike often turn their back on health officers and inspectors. Little of the co-operative spirit that has made some of the factory communities in Eng-

land veritable gardens is met here, and the outcome of some of the experiments in providing better homes for the workers has often been such as to give but scant encouragement to others. The method adopted by Mr. Pullman certainly resulted in fine houses for his employes. He built a town that to an outsider at least appears in every way a model. Beautiful buildings and grounds, model workshops, charming lodge rooms, library, reading room, hotel, theater, play grounds, park, flower beds, shade trees, all so arranged as to present a beautiful view, were to be seen. The town was a conspicuous illustration of what can be done under capitalistic leadership and centralized control. The people there were better housed and enjoy better surroundings than in almost any other place. Still life did not go on smoothly. Differences between employer and employe soon arose and the strife which followed neutralized almost entirely all the good that had been done.

A few cotton manufacturers in the south are trying the same plan, but have not as yet had a fair trial. A few remarkable experiences in this line both here and in England deserve mention.

The Draper Company at Hopedale, Massachusetts, secured a tract of land thirty acres in area on which it erected a number of houses which are rented to the workmen at \$3.00 per week. The place was laid out by an expert and now resembles a village with well kept streets and sidewalks, an excellent sewer system and all necessary improvements. Arrangements have also been made for the effective disposal of garbage. Both front and back yards are kept perfectly clean. The houses are double, each side having six or seven rooms, with good cellar, attic and store room, and are also furnished with water. The firm has also donated a town hall and high school building and takes a great deal of interest in the welfare of its employes and in local matters generally.

The Merimac Manufacturing Company, of Lowell, Massachusetts, has erected a number of tenements which are well fitted and kept. Each apartment has from four to ten rooms and these are rented for much less than the usual prices for such quarters.

The Peace Dale Manufacturing Company, of Rhode Island,

has also done a great deal in the way of assisting its men. Its efforts in this respect begun almost with the century. Among other things they built a number of single houses and sold them to their employes on easy terms. The company has also provided the place with a town hall, library, village church, and is assisting in other ways.

The Westinghouse Air Brake Company, of Wilmerding, Pa., several years ago purchased a large tract of land which was laid out in building lots on which it also erected houses. The entire property was then sold to its employes at actual cost prices on monthly payments. The prices varied from about \$2,000 to about \$3,700, which was from \$300 to \$500 less than the ordinary cost, owing to the fact the company paid cash for everything and took advantage of larger contracts. The payments, which also include an insurance policy for the purpose of clearing the property to the purchaser in case of death, does not exceed the usual rental price. The plans under which this work has been carried on certainly seem practical. A large proportion of the employes have also availed themselves of the opportunity and now own valuable homes.

N. O. Nelson, of St. Louis, Mo., who has done so much in various ways for his employes, secured some years ago a tract of land near Edwardsville, Ill. On this he erected his factories and laid out a beautiful town. He built homes and sold them to his employes on the monthly payment plan, the payments not amounting to more than the rental in cities. The houses are well built and provided with modern conveniences, the water and light even being free or furnished by works which are maintained by the company. The company has also provided schools, libraries, amusement buildings and a campus. In order to encourage improvements among the people, Mr. Nelson has also built a greenhouse and provided a gardener who gives free instruction in the raising and caring of plants and flowers of all kinds. This place is described as a model which it is hoped others will imitate.

England furnishes many examples of the same fine spirit and enterprise on the part of employers. Lever Bros, Port Sunlight, not long ago acquired a large estate. On one corner of

this they erected their factories. The land adjoining has been converted into a beautiful town for the employes. The houses consist of cottages with from four to six rooms each. These are rented to the employes at from seventy-five cents to \$1.25 per week, or for just enough to defray maintenance and taxes. The houses are built with a view to beautiful effect, and are surrounded by lawns and vines, and are very well cared for. Everything that is needed for comfortable living seems to be provided. In addition to this the company has also furnished schools, town hall and other public buildings.

There are records of many other employers there who have provided their employes with comfortable and pleasant homes in the neighborhood of their factories at an extremely low cost. In many places there are also, in addition to this, recreation grounds for men and women, play grounds for children, parks, pools, plunge baths, and other features that go to make up an ideal village.

The illustrations thus given have been picked out because they seem to throw more than ordinary light upon what employers can do and are doing in many cases in the way of securing comfortable and pleasant homes and healthier surroundings. Such undertakings, if properly managed and appreciated, must be productive of a world of good. Is it not possible that their importance has been greatly underestimated in this country?

Building companies, organized for the purpose of facilitating the ownership of homes among the working classes, also show good results. One of these, The City and Suburban Homes Company in New York city, deserves attention. This company is purchasing areas of vacant land where good and cheap transit facilities are afforded. On this they erect houses at the lowest possible cost. The purchaser pays down ten per cent. of the purchase price of the house and lot. The balance is paid in monthly instalments during such period as the parties agree upon. The monthly payments also cover a life insurance policy and amount to little more than the rent alone in the larger cities. This company started out under competent management and is endeavoring to profit by past experience in this line. Its capital stock of \$1,000,000 was largely subscribed by wealthy busi-

ness men but is open to the public at \$10 per share. Interest on it at the rate of five per cent. is offered. Any surplus above this is to be used for extending the business. The company seems to have provided for practically every emergency and the indications are that it will meet all expectations.

The advantages offered by this company cannot be open to all classes of wage-earners, however, as only those who are better paid and whose hours of labor conform more nearly to the regular business hours are likely to be able to meet its terms. Those who earn little may not be able to raise either the first or any subsequent payment. Those again who depend on odd jobs, or who are occupied long hours or at night, may find it impossible to go out into the suburbs. - Much also depends upon the kind of transportation service. Rapid electric trains with low rates are one of the requisites. Those who are working hard all day cannot afford to spend much time in waiting for or riding on trains; nor can they afford to pay out a great deal in fares. The success of such undertakings as the one proposed by this company is therefore largely dependent upon an efficient electric street car service, which emphasizes the importance of these systems of transportation.

But this company does not limit its activities to the erection of homes. It goes much further than this. Recognizing the fact that many cannot get away from the crowded districts, it has taken steps to assist even here by furnishing plans for model apartment houses. These plans are prepared by architects who are experts in their line. The arrangement is such that no room will be without air and light and each apartment will have private water closet and laundry tub. The smallest bed room will have a floor area of seventy square feet, and the smallest living, one hundred forty-four square feet. Laundries, drying-rooms, baths, gas stoves and other conveniences are also supplied. These apartment houses can be built at a cost so low that the rent for each apartment will not exceed that exacted for the filthy places now bearing that name. This is a long step in advance, especially when it is remembered that the new apartments in addition to the modern improvements also have at least twenty-five per cent. more room. The appliances which go to

make a model living house cost money. Expensive houses in turn mean high rent. It may be hard to believe that a building with modern conveniences can be rented as cheap as one of the old pest-ridden tenements which lacks everything that makes existence even tolerable, but experience shows that it is a fact.

It is, of course, not expected that a few companies will be able to furnish all the buildings of this kind that are needed. The real purpose is to set a good example by showing what can be done. It is hoped that the beginning thus made will tend to create such a demand of decent accommodations that landlords generally will be forced to erect better buildings.

Such efforts as landlords, employers, associations and private individuals are likely to make will not, however, wholly solve the housing problem. Landlords are in their business for profit. The per cent. of the earnings upon their investment is likely to be a stronger motive than the comfort of persons in whom they are in no way interested except as renters. The same is true of most employers. The fierce competition which all have to meet permits little to be expended outside of strictly necessary expenses. Many are so situated that they could not assist in providing better houses if they would. This is certainly the case with many who are located where real estate is high. Associations and individuals can reach certain classes among the wage-earners, but not all. The problem is too big, the ground to cover so large, the questions involved so many and intricate that all such efforts as those mentioned are likely to prove inadequate.

If undertakings of this kind fall short of what is really needed something else should be done. The problem is one that properly comes within the province of governmental interference. The government, whether state or municipal, is stronger than any private persons, or semi-private association. It can therefore successfully enter a field that is too great or too difficult for others. The state by extending its factory acts and inspection, and the municipality by a complete body of health and building ordinances and inspection, can supply what is wanted. An inspector or health officer, backed by the necessary legal provisions and with power to enforce them, will command respect and hearing where a private individual is powerless. They can employ force where all other means fail.

Nearly all manufacturing states have their factory laws and inspectors. These laws may not as yet be very complete, nor is the inspection service always the most efficient. In spite of these drawbacks, however, they have been productive of much good. Sanitary conditions have been improved and work in general has become safer. In most cases, however, the factory laws have been limited to factories and the larger workshops only. The smaller shops and places used for both living rooms and workshops have often been left to their fate. This is a serious shortcoming, for it is well known that some of the latter places are the most dangerous. By extending the laws and perfecting the inspection so as to include the home worker as well as the factory, the state can do much towards raising the standard. It can for one thing make dirty places clean. Some states have gone this far and with good results. The principles upon which such interference is based are now settled and there seems to be no reason why the state cannot go as far as necessary in this direction.

When it comes to tenements and other places used for living purposes only it is perhaps best to leave the regulating power to local authorities. In the open country a man may build almost any kind of a house without danger or detriment to his neighbors. It also matters but little how things about it are kept. In the cities, however, the situation is different. Here people are living close together and private dwellings are not mere private interests. A building that is too high may cast a depressing shadow upon its neighbors. It may turn the sun and light which they need and to which they are entitled into a gloom. A defective flue or cracked chimney may endanger the entire block, if not the city itself. Defective closets or sewerage, a filthy backyard, foul air in or about one dwelling of a tenement may threaten not only those who happen to live there but all who live under the same roof and in the vicinity. In such cases single families are helpless. Even the efforts of several families may result in nothing. Without aid from local authorities who have the power to set things right, these people may have to suffer untold injury. Often the better people in such districts lack the knowledge if not the courage to defend them-

selves from filth, disorder and demoralizing influences of bold and shameless neighbors. When all or any of these conditions exist in a crowded city district it is certainly the duty of its government to interfere, both in its own interest and in that of those immediately affected.

In order to do their duty in this respect the cities should have the necessary ordinances and be equipped to enforce them. Such ordinances should be comprehensive and broad enough to cover every emergency that may arise. Their enforcement should be in the hands of competent and conscientious inspectors. Among other things they should prescribe the height of a building, the number of stories, the space it will cover and the space left free, the quality of materials in walls and roof, the height of ceiling, the cubic feet of air space and the window space for admission of light for each room, the quality of plumbing, the kind and position of drain pipes, the methods of ventilation and the kind of chimneys, the means of escape in case of fire, the means for quick and effective care of those who are sick with infectious diseases, and the prevention of their spread, the care of garbage, the removal of filth, and for every other condition of health and safety, including even the condemning and tearing down of the reeking tenement. The ordinances of many cities are now fairly complete and should be closely studied. The parts which need strengthening the most are those which relate to the construction, use and condemnation of buildings. There is also, in many cases, a slackness about the enforcement of such regulations, a thing much to be regretted, as no law of this kind amounts to much unless vigorously enforced. If enlightened self interest had worked in the way laid down for it such regulations would never have become one of the necessities of city life.

While the housing problem is not so pressing in this state as in many other places it is great enough to receive some attention. Our manufacturing centers are growing rapidly and many of the elements which make for overcrowding may easily be detected there. Proper action at this time and a little watchfulness from now on will not only act as a cure but as a preventative.

WEEKLY EARNINGS.

This part deals with wages. It shows the weekly wages. It shows the weekly earnings of coat, pants, vest, cloak, overall, shirt, and jacket makers as well as those of a few persons engaged in custom work. The data were obtained directly from the time books of the employer at the time the inspection was made, and as they were carefully put down and verified they may be regarded as representing the true condition. They were collected because of their importance. No investigation of the condition of any class can be complete until the earnings of its members have been considered, for except in a few cases the earnings constitute an almost unfailing index to the actual condition of the class as a whole. Data relative to the earnings of the various classes of workers also furnish material for useful comparisons.

The figures presented give the earnings by the week of six working days. This unit was selected merely as a matter of convenience as it corresponds more closely to that used for the same purpose in other occupations than any other that could have been chosen. The employment of the workers was in various ways. Some worked by the day; others again by the week; while still others worked by the piece. In the larger shops the foreman was often employed by the month. In computing the weekly earnings different methods, therefore, had to be used. For those employed by the day the amount was obtained by multiplying the daily rate by six. For those employed by the week the weekly rate was of course used. For piece workers the amount of the actual earnings when employed full time was taken. This basis of computation is easily comprehended. Those who may desire to know the rate per day or the earnings per month or year for full employment can readily obtain the desired data from the basis thus given.

Of the eight tables which follow, table I gives the weekly earnings of coat and pant sewers; table II, the earnings of vest makers and custom workers; table III gives those facts for shirt, overall, and jacket makers; table IV includes a few cloak makers; table V includes all of the above tables and is a sort of

summary. In table VI the facts in tables I, II, III and IV have been reduced to a basis which more readily permits comparisons between the wages in each occupation. In table VII the earnings in the above tailoring trades have been reduced to the same classification as that used for the manufacturing returns made by this bureau. This has been done for comparative purposes and the table as it stands opens the way for the comparisons which are made in table VIII.

Table I—WEEKLY EARNINGS OF COAT AND PANTS MAKERS.

WEEKLY EARNINGS.	COATS.			PANTS.		
	Male.	Female.	Total.	Male.	Female.	Total.
\$19.00 per week.....	1		1			
18.00 per week.....	1		1			
15.00 per week.....	4		4	3		3
13.50 per week.....	1		1			
13.00 per week.....	4		4			
12.50 per week.....	2		2			
12.00 per week.....	8		8	4		4
11.00 per week.....	7		7			
10.50 per week.....	4		4			
10.00 per week.....	39		39	5		5
9.50 per week.....	3		3	2		2
9.00 per week.....	29	1	30	8		8
8.50 per week.....	5		5			
8.00 per week.....	9	2	11	6		6
7.50 per week.....	5	5	10	2		2
7.00 per week.....	5	11	16	1		1
6.75 per week.....					1	1
6.50 per week.....		1	1	1		1
6.00 per week.....	1	26	27	5	2	7
5.75 per week.....		1	1			
5.50 per week.....		19	19	1	6	7
5.25 per week.....		1	1			
5.00 per week.....	2	64	66		17	17
4.50 per week.....		40	40	1	42	43
4.25 per week.....		8	8			
4.00 per week.....		61	61	1	27	28
3.75 per week.....		16	16		9	9
3.50 per week.....		28	28		23	23
3.25 per week.....		14	14			
3.00 per week.....	1	36	37		19	19
2.75 per week.....		17	17		5	5
2.50 per week.....	1	23	24		9	9
2.25 per week.....		1	1			
2.00 per week.....		10	10		4	4
1.75 per week.....		2	2			
1.50 per week.....		9	9			
1.25 per week.....		3	3			
Totals.....	132	199	531	40	169	209

Table II—WEEKLY EARNINGS OF VEST MAKERS AND CUSTOM WORKERS.

WEEKLY EARNINGS.	VESTS.			CUSTOM WORK.		
	Males.	Females.	Total.	Males.	Females.	Total.
\$17.00 per week	1		1	1		1
12.00 per week	4		4			
10.00 per week	5		5			
9.00 per week		2	2	1		1
8.00 per week					1	1
6.00 per week		5	5			
5.00 per week		4	4		1	1
4.50 per week		11	11			
4.00 per week					1	1
3.75 per week		12	12		1	1
3.50 per week		5	5			
3.25 per week		11	11		2	2
3.00 per week		8	8			
2.50 per week		5	5		1	1
2.00 per week		1	1			
1.75 per week						
1.25 per week						
Totals	10	64	74	3	7	10

Table III—WEEKLY EARNINGS OF SHIRT, OVERALLS, AND JACKET MAKERS.

WEEKLY EARNINGS.	SHIRTS.			OVERALL, JACKETS, ETC.		
	Males.	Females.	Total.	Males.	Females.	Total.
\$15.00 per week	2		2			
10.00 per week				1		1
9.00 per week					1	1
6.00 per week		10	10	1	9	10
5.60 per week		9	9	1	2	3
4.50 per week		12	12		2	2
4.00 per week		19	19		2	2
3.50 per week					2	2
3.00 per week		10	10		20	20
2.00 per week		2	2			
Totals	2	62	64	3	38	41

Table IV—WEEKLY EARNINGS OF CLOAK MAKERS.

Classification.	Male.	Female.	Total.
\$14.00 per week	1		1
8.00 per week	1		1
4.75 per week		3	3
3.00 per week		2	2
Totals	2	5	7

The four preceding tables relate, as already explained, to the weekly earnings in the various tailoring trades when employed full time.

Table I deals with the earnings of those who make coats and pants. Of the former there were 132 male persons and 399 female persons, or a total of 531. Of the latter there were 40 males, 169 females, or a total of 209 persons. In the case of coat makers the male workers thus constituted 24.86 per cent. of the total, while for the pants makers the males made up only 19.14 per cent. of the total number.

As to the earnings themselves, the first thing to attract attention is the wide range between the highest and the lowest point. Especially is this true of the coat makers. The highest point is at \$19.00 and this amount was received by only one person. The next lowest class is \$18.00 per week, while the third in order is \$15.00. Only four persons, however, received this last amount. From this point the earnings gradually fall. In no class does the number of persons included exceed 8 until \$10.00 per week is reached, but in this class the number foots up to 39. This is the largest number for any one class until the point of \$5.00, which shows 66 persons, nearly all females. Thirty persons, 29 males and one female, received \$9.00 per week or \$1.50 per day. This is the highest point in which any female workers are found. From this down through the lower-paid classes, however, the females largely predominate in number. In fact among the males only a few boys or young men learning the trade received less than \$7.00 per week. For females the earnings mostly range from \$6.00 down to \$2.50 per week, though there is a number both above and below this limit.

For pants makers the range in wages is not quite so wide as for coat makers, but in other respects the tendencies in the two occupations seem to be about the same. Those in the higher classes of earnings are mostly males, those in the lower are nearly all females. This is, of course, true in practically all occupations, regardless of the nature of the duties and the responsibilities involved.

Table II includes 74 vest makers and 10 custom workers. Of the vest makers 10 were males and 64 females. Of those doing

custom work 3 were males and 7 females. This table does not seem to present many features that are not apparent in all the tables. The custom workers included are few in number, and this class cannot be said to be adequately represented in the table.

Table III covers shirts and overalls and jacket makers. Of shirt makers there were 2 males and 62 females, or a total of 64 persons. Of overalls and jacket makers, etc., there were 3 males and 38 females, or in all 41 persons. In this table the earnings of the females are seen to range from \$3.00 to \$6.00 per week.

Table IV deals with the earnings of 7 cloak makers of whom 2 are males and 5 females. These persons were all employed in one shop, the only one of the kind included here. Owing to the few persons included, the table can hardly be regarded as representative.

In the following table the number of persons given in the four preceding tables are combined. This table therefore shows the situation with respect to the weekly earnings in the tailoring trades in Milwaukee:

Table V.—WEEKLY EARNINGS OF COAT, PANTS, VEST MAKERS, AND SHIRTS, OVERALLS, JACKET AND CLOAK MAKERS WHEN COMBINED.

Weekly Earnings.	Males.	Females.	Totals.
\$19.00 per week	1		1
18.00 per week	1		1
17.00 per week	1		1
15.00 per week	9		9
14.00 per week	1		1
13.50 per week	1		1
13.00 per week	4		4
12.50 per week	2		2
12.00 per week	14		14
11.00 per week	7		7
10.50 per week	4		4
10.00 per week	49		49
9.50 per week	5		5
9.00 per week	42	2	44
8.50 per week	5		5
8.00 per week	17	4	21
7.50 per week	7	5	12
7.00 per week	6	11	17
6.75 per week		1	1
6.50 per week	1	1	2
6.00 per week	7	48	55
5.75 per week		1	1
5.50 per week	1	25	26
5.25 per week		1	1
5.00 per week	3	97	100
4.75 per week		3	3
4.50 per week	1	101	102
4.25 per week		8	8
4.00 per week	1	120	121
3.75 per week		26	26
3.50 per week		71	71
3.25 per week		19	19
3.00 per week	1	100	101
2.75 per week		22	22
2.50 per week	1	40	41
2.25 per week		1	1
2.00 per week		21	21
1.75 per week		3	3
1.50 per week		9	9
1.25 per week		4	4
Totals	192	744	936

The above table is the fifth in order. It does not represent any one occupation, but all that were included in the four tables that precede it, being a summary of the tailoring trades. It shows the condition in regard to earnings in these trades more fully than the other tables do. The table includes the earnings of 192 male, 744 female, or of 936 persons who were employed in 63 shops in Milwaukee. In one of the occupations, that of cloak making, only one shop is included. Custom work, overalls, etc., shirts, include three shops each. Vest making is represented by six shops and coat and pants making by thirty-five and twelve shops respectively. From this it might seem that some of the occupations are poorly represented, and in a sense

this is the case, though the inequality is not so great as it appears. The table as it stands furnishes a reliable picture of what the weekly earnings really amount to for those who are employed in the occupations represented. The actual earnings vary greatly. In some classes the number is much greater than in others. In the higher classes those of \$12.00, \$10.00 and \$9.00 per week show the greatest number of persons. Among the lower paid classes those of \$6.00, \$5.00, \$4.50, \$4.00 and \$3.00 are especially prominent in this respect. Only two women earned as much as \$9.00 per week, while the lower paid classes, such as \$5.00, \$4.50, \$4.00 and \$3.00, have one hundred women or more in each. This is a forcible illustration of the difference between men's and women's earnings. This table, or table V, should be closely studied by all who are interested in the condition of those who are employed in the tailoring trades.

Table VI, or the one next in order, is devoted to a few comparisons intended to show the relative earnings in the occupations included:

Table VI.—COMPARISON OF CLASSIFIED WEEKLY EARNINGS IN ABOVE INDUSTRIES.

CLASSIFIED WEEKLY EARNINGS.	NUMBER OF PERSONS.			PER CENT. OF PERSONS		
	Males.	Females.	Totals.	Males.	Females.	Totals.
Coat, Pants Makers:						
\$9.00 and over	125	1	126	72.67	.17	17.03
7.00 and over	158	19	177	91.86	3.35	23.92
6.00 and over	165	49	214	95.93	8.63	28.92
Under \$6.00	7	519	526	4.07	91.37	71.08
Total	173	568	740	100.00	100.00	100.00
Vest, Cloak, Custom work:						
\$9.00 and over	13		13	86.67		14.29
7.00 and over	15	2	17	100.00	2.63	18.68
6.00 and over	15	3	18	100.00	3.95	19.78
Under \$6.00		73	73		96.05	80.22
Total	15	76	91	100.00	100.00	100.00

Table VI—Continued.

CLASSIFIED WEEKLY EARNINGS.	NUMBER OF PERSONS.			PER CENT. OF PERSONS.		
	Males.	Females.	Totals.	Males.	Females.	Totals.
Shirts, Overalls, Jackets:						
\$9.00 and over	3	1	4	60.00	1.00	3.81
7.00 and over	3	1	4	60.00	1.00	3.81
6.00 and over	4	20	24	80.00	20.00	22.86
Under \$6.00	1	80	81	20.00	80.00	77.14
Totals	5	100	105	100.00	100.00	100.00
All of above industries:						
\$9.00 and over	141	2	143	73.44	.29	15.23
7.00 and over	176	22	198	91.67	2.96	21.15
6.00 and over	184	72	256	95.83	9.63	27.35
Under \$6.00	8	672	680	4.17	90.32	72.65
Total	192	744	936	100.00	100.00	100.00

The preceding table is divided into four sections, each one of which is given up to comparisons of the earnings in certain occupations. The first section deals with coat and pants makers; the second with vest and cloak makers, etc.; the third with shirt, overalls and jacket makers, and the fourth with all of these when combined. The earnings in each case are divided into four classes, or those who received \$9.00, \$7.00 and \$6.00 per week and over, respectively, and those who received less than \$6.00 per week.

The table is so arranged as to give both the number and per cent. of the persons in each class. For an illustration of what is meant by this we may turn back to the section for coat and pants makers in the table. Here opposite \$9.00 and over we find that this class included 125 males and one female, making a total of 126 persons. It is further found that the 125 males constituted 72.67 per cent. of the total males in this section; that one female constituted .17 per cent. of the females, and that the 126 persons, which is the total for the class, constituted 17.03 per cent. of the total persons in this section. One-half of the table is thus given up to the number, while the other half of the table shows the per cent.

\$9.00 PER WEEK AND OVER.

Occupations.	Male. Per cent.	Females. Per cent.	Total. Per cent.
Coat and pants makers	72.67	.17	17.03
Vest and cloak makers, etc.....	86.67	.....	14.29
Shirts, overalls, jackets, etc.....	60.00	1.00	3.81
All industries	73.44	.29	15.28

Here is a comparison of the proportion of persons in each of the occupations who received \$9.00 per week and over. As an example of what the figures show those in the last column may be cited. In this column it is found that 17.03 per cent. of the coat and pants makers, 14.29 per cent. of the vest and cloak makers, 3.81 per cent. of shirt, overall and jacket makers received \$9.00 per week and over; while for all of these occupations the average proportion who received this amount was 15.28 per cent. of the total. These figures clearly show that the coat and pants makers enjoyed the greatest earnings when the occupations as a whole are considered. Next in order are the vest, etc., makers, while shirt, overall, etc., makers fall far below the other two classes.

\$7.00 PER WEEK AND OVER.

Occupations.	Male. Per cent.	Females. Per cent.	Total Per cent.
Coat and pants makers	91.86	3.35	23.92
Vest, cloak makers, etc.....	100.00	2.63	18.68
Shirts, overalls, etc.	60.00	1.00	3.81
All industries	91.67	2.96	21.15

The preceding figures show that \$7.00 per week and over was received by 23.92 per cent. of the coat and pants makers, 18.68 per cent. of vest and cloak makers, 3.81 per cent. of shirt and overall makers, and 21.15 per cent. of the total for all occupations. In this case also the first class in order seems to have the advantage in point of earnings.

\$6.00 PER WEEK AND OVER.

Occupations.	Males. Per cent.	Females. Per cent.	Total. Per cent.
Coat and pants makers	95.93	8.63	28.92
Vest and cloak makers	100.00	3.95	19.78
Shirt and overall makers, etc.	80.00	20.00	22.86
All Industries	95.83	9.68	27.36

The tendency that may be observed in these figures differs but little from that in the preceding tables. Occupations in which only about one-fourth of the employes receive over one dollar per day in wages are not very promising.

UNDER \$6.00 PER WEEK.

Occupation.	Males. Per cent.	Females Per cent.	Total. Per cent.
Coats, pants	4.07	91.37	71.08
Vests, etc. ....	.....	96.05	80.22
Shirts, overalls, etc.	20.00	80.00	77.14
All Industries	4.17	90.32	72.65

In this table we find that 71.08 per cent. of the coat and pants makers, 80.22 per cent. of vest, etc., makers, 77.14 per cent. of the shirt, etc., makers, and 72.65 per cent. of the total for all industries received less than \$6.00 per week for their labor. This means that practically three out of every four persons who are engaged in these trades earn less than one dollar per day.

In table VII, the one which follows, the weekly earnings in the tailoring trades have been compiled on the same basis as those for the manufacturing industries found elsewhere in this report.

Table VII—CLASSIFIED WEEKLY EARNINGS.

CLASSIFIED WEEKLY EARNINGS.	NUMBER OF PERSONS.			PER CENT. OF PERSONS.		
	Males.	Females.	Total.	Males.	Females	Total.
Under \$5.00 per week	4	548	552	2.08	73.65	58.97
\$5.00 but under \$6.00	4	124	128	2.08	16.67	13.68
6.00 but under 7.00	8	50	58	4.18	6.72	6.19
7.00 but under 8.00	13	16	29	6.78	2.15	3.09
8.00 but under 9.00	22	4	26	11.45	.54	2.78
9.00 but under 10.00	47	2	49	24.48	.27	5.24
10.00 but under 12.00	60	.....	60	31.24	.....	6.41
12.00 but under 15.00	22	.....	22	11.45	.....	2.36
15.00 but under 20.00	12	.....	12	6.26	.....	1.28
20.00 and over .....	.....	.....	.....	.....	.....	.....
Total	192	744	936	100.00	100.00	100.00

As said above the purpose of the preceding table is to present the facts for the tailoring trades on the same basis as that on which similar data in other industries is given. Uniformity is essential to any comparison. Without it intelligent comparisons would be out of the question. As it now stands the above table presents a fairly good picture of the earnings in the trades included.

The following table, or table VIII, compares the earnings in the tailoring trades included above with that in 46 manufacturing industries in 1900. It will be noticed that these comparisons are limited to the percentages only, the actual number of persons having been omitted:

Table VIII—COMPARISON OF WEEKLY EARNINGS IN TAILORING TRADES AND MANUFACTURING INDUSTRIES.

Per Cent of Persons in each Earn'g Class.

CLASSIFICATION OF WEEKLY EARNINGS	TAILORING TRADES.			MANUFACTURING.		
	Males.	Females.	Total.	Males.	Females.	Total.
Under \$5.00 per week	2.08	73.65	58.97	8.60	62.82	18.23
\$5.00 but under \$6.00.....	2.08	16.67	13.68	2.97	19.19	5.25
6.00 but under 7.00.....	4.18	6.72	6.19	7.16	8.62	7.36
7.00 but under 8.00.....	6.78	2.15	3.69	11.91	4.21	10.83
8.00 but under 9.00.....	11.45	.54	2.78	14.59	2.12	12.67
9.00 but under 10.00.....	24.48	.27	5.24	19.09	1.72	16.65
10.00 but under 12.00.....	31.24	.....	6.41	14.43	1.04	12.54
12.00 but under 15.00.....	11.45	.....	2.56	11.97	.25	10.32
15.00 but under 20.00.....	6.26	.....	1.28	7.06	.02	6.07
20.00 and over .....	.....	.....	.....	2.42	.01	2.08
Total	100.00	100.00	100.00	100.00	100.00	100.00
\$9.00 and over	73.43	.27	15.29	54.96	3.04	47.64
7.00 and over	91.66	2.96	21.16	81.27	9.37	71.15
6.00 and over	95.84	9.68	27.35	88.43	17.99	78.52
Under \$6.00	4.16	90.32	72.65	11.57	82.01	21.48
Total	100.00	100.00	100.00	100.00	100.00	100.00

The preceding table shows the per cent. of persons in 8 tailoring trades and 46 manufacturing industries who received classified earnings in 1900. The figures for the tailoring trades appear to the left and those for the manufactures to the right. The table is also divided into two sections. The first in order of these gives the situation in a more extended form; the second gives it in a form that has been so reduced as to make comparisons easier.

As arranged, the second part presents a fairly clear view of the earnings of both classes, and the relation which the earnings of one bear to the other. Opportunity is given to compare the earnings not only of males and females separately, but of the total of both sexes for each of the two occupations.

In comparing the males alone it appears that those in the tailoring trades are the best paid. There are several reasons for this. In the tailoring trades comparatively few males are employed, and those who are so employed receive better wages because they are doing work which requires the greatest skill. At the time of this inspection very few boys were employed and this also tends to make the showing for the males much better.

In the case of the females, however, the situation is reversed. In the tailoring trades the females earned less than in the manufacturing industries. The condition in this respect is fairly illustrated by the figures in the table which show that 90.32 and 82.01 per cent., respectively, for the two occupations received less than one dollar per day. In the tailoring trades the competition for work among the women is even greater than in the factories. This fact perhaps largely accounts for the lower earnings in the former class.

In considering the total of both males and females it developed that on the whole the best wages are earned in the manufacturing institutions. This is well shown by the fact that in these, 78.52 per cent. received one dollar per day or over, while in the tailoring trades this was the case for only 27.35 per cent. of the workers.

In the tailoring trades the females constituted 79.95 per cent. of the total number; in the manufacturing industries they constituted only 14.07 per cent. This fact largely accounts for the lower earnings in the former trades.

In the foregoing pages has been seen, first, the actual weekly earnings of each worker investigated in the tailoring trades when employed full time, the classified weekly earnings, and comparisons of earnings as between the different occupations in these trades, as well as between those employed in these trades and those employed in the manufacturing industries in this state. The real object of these presentations is to give some

idea as to the situation in the tailoring trades with reference to earnings. The facts thus given will here be supplemented by the notes of one of the inspectors in his visits to sixteen shops where clothes were made. These notes are interesting. Facts are brought out in them that could not have been included in the tables:

———. Makes overcoats for ——; employs 35 hands; all work by week; small girls are paid from \$1.25 to \$2.50 per week; experienced sewers from \$4 to \$7 weekly; men get from \$9 to \$13. Season for work is about nine months in the year; price paid by the wholesalers is from \$1 to \$1.75 for each garment.

———. Makes overcoats for ——; 15 employed (4 men; all work by week and receive from \$2.50 to \$6 per week; one girl gets \$7.50; one gets only \$1.25; men get \$10 a week. Prices paid by wholesalers range from \$1.00 to \$1.75 for each garment.

———. Makes high grade overcoats for ——; employs about 18 people (3 men); all work by week; girls are paid from \$4 to \$5; men from \$10 to \$11; proprietor is paid from \$1 to \$2 for the making of the coat complete; coats for which he gets \$2 are retailed at from \$20 to \$24, and the material in them costs from \$4.50 to \$7.50, according to the grade of the linings. Season about eight months in the year.

———. Manufactures men's working shirts and jackets; employ 23 girls, who all work by the piece except one girl, who earns \$1.50 per week. Other girls work by piece on different parts of shirt (5 girls to a shirt). Experienced girls on piece work earn from \$3.50 to \$5 per week. Experienced girls on working jackets gets 58c. per dozen for making the fronts and can make about eighteen per day with steady work. Working season is all year round, except during the summer months only about half the number are employed.

———. Makes men's working shirts for ——. Employs 11 girls, three of whom work by the week and are paid \$3, \$3.50 and \$4 per week. Other girls work by the piece and earn from \$3 to \$4. Proprietor makes about 100 dozen per week, for which he receives 55c. per dozen.

Miss ———. Makes rubber lined mackinaw coats for ——. Works by piece and gets \$2.70 per dozen for rubber lined and \$2.25 for coats not rubber lined. If she works steady and hard can make eighteen coats in a week of ten hours per day.

Mrs. ———. Makes mackinaw jackets for ——. By working steady she can make four dozen in six days of ten hours each, but could not keep it up. Gets \$1.05 per dozen.

Mrs. ———. Makes vests for ——. Gets from 25 to 33 cents for each vest, and from this amount she pays out six cents for the making of the button holes. Mother and two daughters work steady and make seven vests a day working about eleven hours.

Mrs. ———. Makes crocheted hoods for the —— Co. Gets 12 cents a piece for them, and if she worked steady can make about three in a day of 10 hours.

Miss ———. Makes infant's crochet jackets for the ——— Co. Could not make over six a day working hard and steady. Calls for and delivers her own work. Gets 6 cents apiece for them.

———. Makes men's pants for ———. Employs about 15 people, most of whom work by the week. One girl works by piece, making back pockets and makes about three dozen a day, for which she receives 24 cents per dozen. Girls working by the week get from \$2.50 to \$5 per week and one girl is paid \$7. Two men employed get \$9 each per week. Boss receives an average of 23 cents per pair for the finished pants from the wholesaler. Season about ten months of the year.

Misses ——— and ———. Make pants for ———. Employ about 48 people, all of whom work by the week. Girls are paid from \$2 to \$6, according to the ability of the operator; average about \$3.75 per week. Men get \$9 and \$11 per week for pressing. These women make the best grades of pants for the finest ready-made suits, turning out about 1,600 pairs per week. The prices for the finished pants range from 22 cents to 33 cents per pair, and from this amount the maker has to pay from 6 to 8 cents for "finishing" (sewing on buttons, etc.). This part of the work is done by women who take the work home.

——— Company. Make overalls and working jackets; also a few cotton pants. Employ about 13 girls in shop, all of whom work by the piece and are paid from 36 cents to 50 cents for overalls and 65 cents for cotton pants (per dozen). Most experienced employees earn from \$5 to \$5.50 per week at these prices.

——— Company, ———. Most of the work is given out to be made up by the piece. Four girls work in shop by the piece and average about a dozen and a half a day, for which they receive 50 cents per dozen.

———. Makes coats. Has 21 people employed, some of whom work by the piece. Four girls work by the week, two of whom get \$2 and two \$5 per week. Three piece girls earned last week \$6.40, \$8.57 and \$8.60, respectively. Smaller girls earn from \$2 to \$3 per week. One man earns \$18 per week. The proprietor of this shop gets for the best satin-lined sack coats \$1.12 and he says it costs him \$1.02 to make the coat, aside from his own labor. For the best Prince Albert coats he gets \$2.25 apiece.

——— Company. Manufacturers of ladies' cloaks, jackets and ladies' tailoring. Employ eight people for about five months in the year. Girls are paid by the week from \$3 to \$5, and men are paid \$8 to \$15.

These notes explain themselves. To attempt to summarize the facts they contain would in no way enhance their value. In connection with the tables which precede them they furnish a fairly comprehensive view of the situation.

Hours of Labor Daily:—The number of hours which constitute a day's work in these trades corresponds quite closely to those in other industries. This is seen from the following facts:

73 shops employing	1,088 persons	were running	10 hours	daily.
3 shops employing	63 persons	were running	9 hours	daily.
2 shops employing	21 persons	were running	9½ hours	daily.
1 shop employing	5 persons	were running	8 hours	daily.

Of the 1,177 persons which were thus employed in 79 workshops, 1,088, or about 92.5 per cent. of the total were thus employed 10 hours per day. The other 89 persons were employed from 8 to 9½ hours.

These figures represent the regular workshops only. Families or persons who take their work to their homes seldom have regular hours. Most of them, in fact, are at work the greater part of the time.

THIRD INVESTIGATION.

The preceding investigations convey a fairly clear idea of the conditions in this state with regard to the sweating evil. Sweating in its worst form is not generally present, but the conditions upon which it develops are here and unless checked at this point it is only a matter of time when we will be confronted with the sweating evil in all its phases. It also had become evident that our present laws relating to sweating and the system of inspection by which they were enforced were inadequate to afford the necessary check to any further growth of sweating. In considering the situation as a whole, therefore, there was much to be desired. While it was gratifying to know that sweating was, as yet, not a fixed institution among us, it was rather discouraging to find that it had acquired some foothold, that the elements of growth are present, and that our means for preventing any further growth were, at least, partially lacking. It was plain that something ought to be done, some step taken that would result, not only in improving the present situation, but that would effectively prevent this evil from becoming a fixed condition. To this end a bill for a new law upon the subject was prepared and introduced in the legislature of 1901. This bill passed both houses, was signed by the governor, and became law. It reads as follows:

CHAPTER 29, LAWS OF 1901.

Providing for the preservation of public health.

Manufacturing, altering, repairing, and finishing articles; License.—Section 1. No room or apartment in any tenement or dwelling house or in a building situated in the rear of any tenement or dwelling house, shall be used for the purpose of manufacturing, altering, repairing or finishing therein, for wages or for sale, any coats, vests, knee pants, trousers, overalls, cloaks, hats, caps, suspenders, jerseys, blouses, dresses, waists, waist bands, underwear, neckwear, knit goods of all kinds, furs, fur trimmings, fur garments, skirts, shirts, purses, feathers, cigarettes, cigars or umbrellas, unless a license is secured therefore as provided in this act. Application for such a license shall be made to the commissioner of labor and industrial statistics by any family or a member thereof or any person, firm or corporation, desiring to manufacture, alter, repair or finish any such articles in any room or apartment in any tenement or dwelling house or by any person, firm or corporation desiring to perform such work in any building in the rear of any tenement or dwelling house. Such application shall describe the room or apartment, shall specify the number of persons to be employed therein, and shall be in such form as the commissioner of labor and industrial statistics may determine. Blank applications shall be prepared and furnished by the commissioner of labor and industrial statistics. Before any such license is granted, an inspection of the room, apartment, or building sought to be licensed, must be made by the commissioner of labor and industrial statistics, factory inspector or assistant factory inspector. If the commissioner of labor and industrial statistics, factory inspector, or assistant factory inspector, ascertain that such room, apartment or building, is in a clean and proper sanitary condition, and that the articles specified in this section may be manufactured therein under clean and healthful conditions, he shall grant a license permitting the use of such room, apartment or building, for the purpose of manufacturing, altering, repairing, or finishing such articles. Each license shall state the maximum number of persons who may be employed in the room or rooms to which such license relates. The number of persons to be so employed shall be determined by the number of cubic feet of air space contained in each room or apartment mentioned in such license, allowing not less than two hundred and fifty cubic feet for each person employed between the hours of six o'clock in the morning and six o'clock in the evening, and unless by a special written permit of the commissioner of labor and industrial statistics, factory inspector, or assistant factory inspector, not less than four hundred cubic feet for each person employed therein between the hours of six in the evening and six in the morning, but no such permit shall be issued unless such room or apartment has suitable light at all times during such hours, while such persons are employed therein. Such license must be posted in a conspicuous place in the room or apartment to which it relates. It may be revoked by the commissioner of labor and industrial statistics, factory inspector or assistant factory inspector, if the health of the community or of the employes requires it, or if it appears that the rooms or apartments, to which such license relates, are not in a healthy and proper sanitary condition. Every room or apartment in which any of the articles named in this section are manufactured, altered, repaired or finished, shall be kept in a clean and sanitary condition and shall be subject to inspection and examination by the commissioner of labor and industrial statistics, factory inspector, or assistant factory inspector, for the purpose of ascertaining whether said garments or articles or any part or parts thereof are clean

and free from vermin and every matter of infectious or contagious nature. No person, firm or corporation, shall hire, employ or contract with any member of a family or any person, firm or corporation not holding a license therefor, to manufacture, alter, repair or finish any of the articles named in this section in any room or apartment in any tenement or dwelling house or in any room or apartment in any building situated in the rear of a tenement or dwelling house as aforesaid; and no person, firm or corporation shall receive, handle or convey to others or sell, hold in stock or expose for sale, any goods mentioned in this section unless made under the sanitary conditions and in accordance with this act. This section shall not prevent the employment of a tailor or seamstress by any person or family for the purpose of making, altering, repairing or finishing any article of wearing apparel for such person or for family use.

Appeal to board of health.—Section 2. Whenever the commissioner of labor and industrial statistics, factory inspector or assistant factory inspector by his judgment revokes or refuses to grant a license to any person or persons because of the unhealthy or unsanitary conditions in or surrounding the place where any of the aforesaid goods are or are to be manufactured, the person or persons aggrieved by such decision may appeal to the board of health of such city, village or town wherein said license was refused or revoked. The board of health after receiving a written notice of the appeal from the person or persons aggrieved, shall immediately investigate the conditions and surroundings of the place wherein any of the goods are or are to be manufactured as mentioned in the aforesaid, and if they find that a license can be granted without injuring or impairing the public health, that such finding shall be immediately reported in writing to the commissioner of labor and industrial statistics, who shall thereupon grant such license.

May require separate rooms; sanitary measures.—Section 3. The commissioner of labor and industrial statistics, factory inspector or any assistant factory inspector may, when he deems it necessary, require that all rooms or apartments used for the purpose of manufacturing, altering, repairing or finishing therein any of the aforesaid goods or articles as mentioned in section 1 shall be separate from and have no door, window or other opening into any living or sleeping room of any tenement or dwelling and that no such rooms or apartments shall be used at any time for sleeping purposes and shall contain no bed, bedding or cooking utensils. He may further require or direct a separate outside entrance to the room or apartments where the work is carried on, and if such work is carried on above the first floor, then there may be directed a separate and distinct stairway leading thereto and every such room or apartment shall be well and sufficiently lighted, heated and ventilated by ordinary, or if necessary, by mechanical appliance. He may also require suitable closet arrangements for each sex employed as follows: Where there are ten or more persons and three or more to the number of twenty are of either sex, a separate and distinct water closet, either inside the building with adequate plumbing connections or on the outside, at least twenty feet from the building, shall be provided for each sex. When the number employed is more than twenty-five of either sex, there shall be provided an additional water closet for such sex up to the number of fifty persons, and above that number in the same ratio, and all such closets shall be kept strictly and exclusively for the use of the employees and employer or employers. All closets shall be regularly disinfected and the commissioner of labor and industrial statistics, factory inspector or (any) assistant factory inspector may require all other necessary changes or any process of cleaning, painting or whitewashing which they may deem necessary before the issuing of the license.

Register of persons to whom work is given.—Section 4. Any person, firm or corporation, by themselves or by their agents or managers, contracting for the manufacturing, altering, repairing, or finishing of any of the articles mentioned in section 1 of this act, or giving out material from which they or any part of them are to be manufactured, altered, repaired or finished, shall keep a register of the names and addresses, plainly written in English, of the persons to whom such articles or materials are going to be so manufactured, altered, repaired or finished or with whom they have contracted to do the same. Such register shall be subject to inspection on demand, by the commissioner of labor and industrial statistics, factory inspector, or (any) assistant factory inspector, and a copy thereof shall be furnished at his request.

Board of health to condemn; when.—Section 5. If the commissioner of labor and industrial statistics, factory inspector or (any) assistant factory inspector find that infectious or contagious diseases exist in a workshop, room or apartment of a tenement or dwelling house or of a building in the rear thereof in which any of the articles specified in section 1 of this act are being manufactured, altered, repaired or finished or that articles manufactured or in process of manufacture therein are infected or that goods used therein are unfit for use, he shall report to the local board of health, and such board shall issue such order as the public health may require. Such board may condemn and destroy all such infectious article or articles manufactured or in the process of manufacture under unclean or unhealthful conditions.

Owners of tenement and dwelling houses not to permit the unlawful use thereof.—Section 6. The owner, lessee or agent of a tenement or dwelling house or of a building in the rear of a tenement or dwelling house shall not permit the use thereof for the manufacture, repair, alteration or finishing of any of the articles mentioned in this act contrary to its provisions. If a room or apartment in such tenement or dwelling house or in a building in the rear of a tenement or dwelling house be so unlawfully used, the commissioner of labor and industrial statistics, factory inspector, or (any) assistant factory inspector, shall serve a notice thereof upon such owner, lessee or agent. Unless such owner, lessee or agent shall cause such unlawful manufacture to be discontinued within thirty days after the service of such notice or within fifteen days thereafter, institutes and faithfully prosecutes proceedings for the dispossession of the occupant of a tenement or dwelling house who unlawfully manufactures, repairs, alters or finishes such articles in any room or apartment therein, he shall be deemed guilty of a violation of this act as if he himself was engaged in such unlawful manufacture, repair, alteration or finishing.

Penalty.—Section 7. Any person, firm or corporation, agent or manager of any corporation who whether for himself or for such firm or corporation or by himself or through agents, servants or foremen shall violate any of the provisions of this act shall upon conviction thereof be fined in any sum not less than twenty dollars nor more than one hundred dollars for each offense, or imprisoned not less than twenty or more than sixty days or both, and in all prosecutions brought by or under the direction of the commissioner of labor and industrial statistics for the violation of this act, he shall not be held to give security for costs or adjudged to pay any costs but in all cases where the accused be acquitted or is found to be indigent, the costs shall be paid out of the county treasury of the county in which the proceedings are brought the same as the costs in all other cases of misdemeanor.

Section 8. Chapter 232 of the laws of 1899 is hereby repealed.

This law is now upon the statute books of this state and has been in force about one year. It is not the only law, however, in this state by which sweatshops are affected. Our factory laws contain many provisions that relate not only to factories but to the smaller shops, or practically every place where persons are employed and work is performed. They affect shops where garments are made just as much as shops where other articles are made. In order, therefore, to convey a fairly accurate idea of the various provisions not only in the above law, but in the factory laws as a whole, which affect places where garments are made, the following analysis is presented. The references under each provision indicate whether said provision may be found in the above law, or in the factory laws generally.

An analysis of Ch. 239, L. '01, and other laws applicable to making, finishing or repairing wearing apparel, etc.

Rooms or apartments in tenements, dwellings, etc.—

Shall not be used for making, finishing or repairing wearing apparel, unless a license is secured therefor to conform with this act.

Shall provide for each person employed therein not less than 250 cu. ft. air space from 6 A. M. to 6 P. M., and 400 cu. ft. from 6 P. M. to 6 A. M., unless special written permit given by Bureau officials provides otherwise.

If commissioner or factory inspector require it, shall be separate from and not open into living or sleeping rooms.

Shall have an entrance from outside direct. (If above first floor a separate stairway.)

Shall be properly lighted, heated and ventilated, if necessary by mechanical appliance (Sec. 3, Ch. 239, L. '01).

Goods shall not be contracted to be made in any building that does not conform to this act or unless occupant possesses a license as heretofore required (Sec. 1, Ch. 239, L. '01).

Premises to be clean and subject to inspection of Bureau officers.

Those giving out material to be made into these goods shall keep a register, written in English, of the names and addresses of persons to whom work is given out. This register is subject to inspection by Bureau officers, and a copy thereof furnished at their request (Sec. 4, Ch. 239, L. '01).

Owners, lessees or agents shall not permit them to be used for the making, finishing or repairing of wearing apparel contrary to this act.

When so unlawfully used the Bureau officers shall serve notice upon such owner, lessee or agent (Sec. 6, Ch. 239, L. '01).

Closets—

If commissioner or inspectors require it there shall be suitable closets for each sex.

Shall be kept strictly and exclusively for the use of employees and employer.

Shall either be inside the building with adequate plumbing or outside at least 20 ft. from building.

Where the number employed exceeds 25 of either sex there shall be an additional closet for each sex up to 50 persons and above that number in the same ratio.

Shall be regularly disinfected and supplied with disinfectants (Sec. 3, Ch. 239, L. '01).

Note.—The provision as to closets in Ch. 239, L. '01, should be construed with more rigid requirements in Sec. 7, Ch. 79, L. '99, which relates to cigar factories only.

Employees—

More persons shall not be employed than can be kept at work without violating laws of health (Sec. 1021g).

Shall each have not less than 250 cu. ft. air space from 6 A. M. to 6 P. M., and 400 cu. ft. from 6 P. M. to 6 A. M., unless special written permit given by the Bureau officials provides otherwise (Sec. 1, Ch. 239, L. '01).

Number of employees must be specified in application for license.

Shall be provided (if females) with suitable seats, and permitted to use them when not necessarily engaged in duties (Ch. 77, L. '99).

Women shall not be employed in any place used for mfg. over 8 hrs. in any one day (Sec. 1728).

Note.—For provisions as to outward swinging doors, fire-escapes on factories three or more stories high, and having twenty-five or more employees, see Sec. 4390, as amended by Ch. 380, L. '01, and 4390. For provisions as to "Closets," see above.

Child labor—

Shall not (if under 14 years of age) be employed in any factory (except a special written permit has been issued as herein required).

A register shall be kept in factory in which must be the name, age, date of birth, residence, of every child at work under 16.

Employes under 16 must not work unless there is on file in factory an affidavit as herein provided. (Affidavit and register on demand must be produced for inspectors.)

Employes under 16 must not work after 9 P. M. or before 6 A. M., nor have charge of any elevator.

Minors must not work who cannot obtain from a physician a certificate of physical fitness for the work (Ch. 274, L. '99, amended by Ch. 182, L. '01).

License—

For making, finishing or repairing wearing apparel in room or apartments of dwelling or tenement houses, or in rear thereof, is required before rooms, etc., can be legally thus used.

Applications for—

Applications to be made to the commissioner to make, finish or repair any wearing apparel:

Shall describe such room or apartment.

Shall specify number of persons employed therein.

Shall be in such form as the commissioner may determine.

Applications—blanks for—

Shall be prepared by said commissioner.

License—pre-requisite to granting—

Before granting license an inspection must be made.

To be granted when—

If premises are clean and satisfactory and the work may be done under healthy conditions, a license shall be granted.

What to state—

To state maximum number of persons to be employed in room, etc., which shall be determined by the number of cu. ft. of air space.

Must be posted—

In conspicuous place in room, etc.

May be revoked—

By commissioner or inspector if rooms, etc., are not in sanitary condition.

When revoked or refused mfrs. may appeal—

When license is refused or revoked owing to unsanitary conditions, the person aggrieved may appeal to the local board of health and said board may investigate and report in writing to Bureau officers if it is found that a license can be properly granted, and it shall thereupon be issued (Sec. 2, Ch. 239, L. '01).

Wearing apparel—

Shall not be received, handled, held in stock or sold unless made under the requirements of this act (Sec. 1, Ch. 239, L. '01).

May be condemned and destroyed by local board of health if unfit for use, because made in places where infectious or contagious diseases exist (Sec. 5, Ch. 239, L. '01).

Duties and powers—

Of commissioner—

Power—

Commissioner may prescribe blank forms and transmit them to employers to be filled out under oath and returned to him (Sec. 1021 f).

Of commissioners and factory inspectors—

Duty—

To enforce this law and prosecute its violation.

To visit and inspect all places covered by this act.

To serve notice upon owner, lessee or agent of building when rooms and apartments are unlawfully used (Sec. 6, Ch. 239, L. '01).

To report to local board of health when infectious or contagious diseases exist where wearing apparel is made (Sec. 5, Ch. 239, L. '01).

Power—

May demand a physician's certificate of physical fitness to work in case of children who seem unfit for work at which they are employed.

May in their discretion, after due examination, grant permit to children over 12 years to work under conditions herein named (Ch. 274, L. '99, amended by Ch. 182, L. '01).

May require all necessary changes, cleaning, painting, white-washing, which they deem essential to insure freedom from vermin, stench, or condition liable to impair health or breed disease (Sec. 2, Ch. 239, L. '01).

May file charges and demand removal of Dist. Atty who fails to bring proceedings at once where law is violated after having written notice (Sec. 1021i.)

Penalties—

For violating acts affecting garment making and places where garments are made. (So-called sweat-shop act.)

Fine \$20 to \$100 each offense, or imprisonment 20 to 60 days or both.

In prosecutions where accused is acquitted the costs shall be paid out of the county treasury.

Unless owner, lessee or agent upon notice stops unlawful manufacture, or proceeds to oust the occupant, he shall be deemed as guilty as if he himself manufactured illegally (Ch. 239, L. '01).

For failing to provide seats for females employed and permit their use, \$10 to \$30 for each offense (Ch. 77, L. '99).

For compelling a woman to work more than 8 hrs. in any one day in any place used for mfg., fine \$5 to \$50 (Sec. 1723).

For failing to fill out blanks required by commissioner, forfeit \$10 for each day delay after fixed return time; for failing to admit Bureau officers to shop, forfeit \$10 for each offense (Sec. 1021 l).

For neglecting for 30 days after written notice to provide suitable place for employes to work, forfeit \$25 for each offense.

Every day's neglect or failure after conviction to constitute separate offense (Sec. 1636).

Fine not more than \$500 or 90 days' imprisonment for violating this section, which provides that those erecting factories shall have outer doors swing outward (Sec. 4590, amended by Ch. 380, L. '01).

Any corporation violating this act or hindering or delaying inspectors, subject to fine of \$10 to \$100 for each offense.

Parent or guardian who permits child to work in violation this act, subject to fine of \$5 to \$25 (Ch. 274, L. '99).

The law thus given in full above and which, as is seen from the preceding analysis, includes the main provisions for the regulation of garment making in this state, was prepared with advice and assistance of ex-attorney general of the state, Mr. C. E. Estabrook, of Milwaukee, who takes a great deal of interest in legislation of this nature. The bill embodying the law was introduced into the legislature by Assemblyman H. J. Soltwedel, also of Milwaukee. Both Mr. Estabrook and Mr. Soltwedel presented facts and arguments in favor of the passage of the bill before the legislative committee to which it was referred, and it is largely due to their efforts that this law was placed upon the statute books.

This law differs from the one that preceded it mainly in this, that it requires a license to be obtained by all who manufacture garments, or the articles named in the law. In other words, under this law no room or apartment, etc., shall be used for the manufacturing, etc., therein for wages or for sale any of the articles mentioned in the law unless a license as provided by law

is secured for such purpose. This was regarded as an important provision. The license system would not only permit the inspection of private homes where such work was carried on, but would assist the inspectors in keeping some kind of a check on the evasive sweater and thus enable the laws to be more fully enforced.

The first inspection under the new law was begun in the fall of 1901. Between that time and July 1st, 1902, about 300 licenses were granted. In granting these licenses the inspectors visited each place and reported in full upon the conditions. These reports for 280 places have been compiled in a series of tables which are presented in the following pages.

The table which follows is the first in order of these presentations. In this table the places visited are classified as to the kind of goods made and the number of establishments and persons employed for each industry are given:

INDUSTRIES, ESTABLISHMENTS, EMPLOYES.

INDUSTRIES.	ESTABLISHMENTS.		EMPLOYES.	
	Number.	Per cent	Number	Per cent.
Coats	75	26.80	731	47.89
Vests	55	19.64	179	10.93
Trousers, etc.	56	20.00	278	17.00
Gloves, etc.	65	23.21	79	4.81
Miscellaneous	29	10.35	317	19.37
Total	280	100.00	1,637	100.00

In the preceding table it is seen that the places included were classified as follows: Coats, vests, trousers, etc., gloves, mittens, etc., and miscellaneous. These classifications, however, do not strictly conform to the actual situation, and the reason for this is that in many places more than one kind of article was made. Places which thus turned out a mixed product were either classified with the one which they regarded as the largest or most important, or placed with the "miscellaneous."

Each place or shop, regardless of size and number of persons employed, was regarded as an establishment. The total number of places or establishments included is 280, of which nearly 27 per cent. turned out mostly coats of all kinds. About 20

per cent. in each case were making vests and trousers, while about 23 per cent. turned out gloves and mittens, and over 10 per cent. showed a miscellaneous product.

In all 1,637 persons were employed in the 280 establishments included, and of these the greatest proportion were engaged in the making of coats. The next in order of importance from this point of view is miscellaneous, with 317 persons, and trousers, with 228 persons. Vests and gloves have 179 and 79 persons, respectively. The per cent. of the total for all of the persons in each class is, coats, 47.79 per cent.; vests, 10.93; trousers, 17.00; gloves, etc., 4.81, and miscellaneous, 19.37 per cent.

The average number of persons to each shop is as follows: Coats, 10.45 persons; vests, 3.25; trousers, 4.96; gloves, etc., 1.21, and miscellaneous, about 10 persons.

A classification of the persons employed in each establishment gives the following results:

Classification.	Coats.	Vests.	Trousers	Gloves.	Miscellaneous.	Total.
One person	20	30	32	55	3	145
2 to 5 persons, inclusive.	23	19	15	10	7	74
6 to 10 persons, inclusive.	9	2	2	.....	4	17
Over 10 persons	23	4	7	.....	10	44
Total	75	55	56	65	29	280

Here it appears that of the establishments included, 145, or about 52 per cent., had only 1 employe each, that 74 had from 2 to 5 persons inclusive each, that 17 had 6 to 10 persons inclusive, each, and that 44, or over 16 per cent., had over ten persons each. These facts convey a fairly good idea of the relative importance of the establishments.

KIND OF BUILDING OCCUPIED.

INDUSTRIES.	WOOD. Stories high.			BRICK. Stories high.		
	One	Two.	Three.	One.	Two	Three.
Coats	42	32	.....	.....	1	.....
Vests	21	11	1	.....	2	.....
Trousers	28	26	1	.....	1	.....
Gloves and mittens, etc..	43	21	.....	.....	1	.....
Miscellaneous	15	10	.....	.....	2	2
Total	149	120	2	.....	7	2

The preceding table shows the kind of buildings occupied by the establishments in question. Of the 280 buildings, 271 were of wood and 9 of brick. Of the wooden, or frame buildings, 149 were one story structures, 120 two stories, and 2 three stories in height. The brick buildings show 7 two story and 2 three story structures. The buildings were also in practically every case separate structures, and this fact, in addition to the table, makes it clear that the garment making in Milwaukee is not carried on in tenements as is the case in many other cities.

PURPOSE FOR WHICH BUILDINGS AS A WHOLE WERE USED.

Industries.	Dwellings.	Factories.	Other Business.
Coats	40	26	9
Vests	51	2	2
Trousers	47	5	4
Gloves, etc.	64		1
Miscellaneous	25		4
Total	227	33	20

Of the 280 buildings occupied, 227, or 81 per cent. of the total, were dwellings, 33, or 12 per cent., regular factories, and 20, or 7 per cent., also for other business purposes, mostly store buildings with the shop above the first floor. The most striking feature about this table is the large proportion of the shops which were located in the regular dwelling houses, and which therefore had to serve in the double capacity of home and workshop. This, as has been pointed out already, is one of the most serious evils in the sweating problem.

PART OF BUILDING OCCUPIED BY SHOP.

INDUSTRIES.	Basement	FLOORS.		
		First.	Second.	Third.
Coats	6	57	12	
Vests	4	28	13	
Trousers	6	41	8	1
Gloves, etc.	8	47	9	1
Miscellaneous	3	22	3	1
Total	27	205	45	3

In the above table is shown what part of the building was occupied by the shop. Taking the totals for all industries it is

found that 27 shops, or less than 10 per cent., were located in the basement; while 205, or over 73 per cent., were on the first floor; 45, or about 16 per cent., on the second floor, and about 1 per cent., or 3 shops, on the third floor. Of those located in the basement, 3 were in such condition that no license could be issued and in one, for which a license was issued, it has since been revoked.

NUMBER MALE AND FEMALE EMPLOYEES.

Industries	Male.	Female.	Total.
Coats	262	532	784
Vests	27	152	179
Trousers	59	219	278
Gloves, etc.	5	74	79
Miscellaneous	83	234	317
Total	426	1,211	1,637
Per cent.	26	74	100.00

PER CENT. OF MALES AND FEMALES.

Industries.	Per cent. Males.	Per cent. Females	Total.
Coats	32.12	67.88	100.00
Vests	15.08	84.92	100.00
Trousers, etc.	21.23	78.77	100.00
Gloves, etc.	6.33	93.67	100.00
Miscellaneous	26.17	73.83	100.00
Total	26.00	74.00	100.00

The preceding two tables show respectively the number and per cent. of the male and female employees. In considering the totals it is found that of the whole number of 1,637 persons employed, 426, or 26 per cent., were males and 1,211, or 74 per cent. were females. In these industries therefore the females greatly outnumber the males, in fact out of each 100 persons employed there were 74 females as against 26 males.

This is the situation when all the industries are considered. When each industry is taken by itself the situation is somewhat different. In coats, for instance, the proportion of males is much greater; in fact, it constitutes over 32 per cent. of all who were engaged in this trade. In trousers and miscellaneous the proportion of males stands at 21.23 and 26.17 per cent. re-

spectively. In vests the per cent. of males is much smaller, and in gloves, etc., it is smaller still, standing at 15.08 in the former and 6.33 per cent. in the latter. These facts would seem to indicate that the garment making industry is essentially a women's industry, especially is this true in some of its branches.

The next presentation in order deals with young persons and children. It shows the number of young persons between 16 and 18 years, the number between 14 and 16 years, and the number of children under 14 years who were employed in the occupations in question.

NUMBER OF YOUNG PERSONS AND CHILDREN.

Industries.	16 — 18 years.	14 — 16 years.	Under 14 years.
Coats	64	73	5
Vests	14	8	2
Trousers	24	17	3
Gloves, etc.	5	.....	1
Miscellaneous	24	18	1
Total	131	116	12

From the above table it is seen that there were employed in the five industries included, 131 young persons between 16 and 18 years of age, 116 children between 14 and 16 years of age, and 12 children under 14 years of age. Except in cigar factories, where no person under 18 years of age shall be employed more than eight hours in any one day, there is practically no restriction upon the employment of young persons over 16 years of age that does not also apply to the employment of adult persons generally. As to children under 16 years their employment is, of course, more or less restricted in all the regular occupations. The number of children, however, was not very large. Including all who were under 16 years, and they numbered 128, or about 7 per cent., of the total persons employed, a relation that varies but little from that shown in the two former investigations. As has been pointed out already, the garment making industries can not be said to be in the hands of the child-worker. Compared in this respect with many other occupations their record is fairly clean. By this is not meant that the sweater, as

a rule, has any scruples about employing children if it is to his advantage to do so, for he very often has none; at least he is no improvement in this respect over the run of other employers. But there is only a certain part of the work in the making of garments that can be safely placed in the hands of children, and this fact acts as a regulating force. The enforcement of the factory laws is, of course, tending towards the reduction of child labor everywhere.

In considering each industry by itself it will appear that the greatest proportion of children were found in the shops where coats were made. The difference in this respect, however, as between the industries is not great.

The two tables which appear next in order deal with the hours of labor, showing first the hours in operation by each establishment, and second, the number of hours of labor daily by each employe.

CLASSIFICATION OF THE HOURS OF LABOR DAILY AND THE NUMBER OF ESTABLISHMENTS IN EACH CLASS.

Industries.	8 hours or less.	9 Hours.	9½ Hours.	10 hours.	Over 10 hours	Total.
Coats	11	3	1	56	4	75
Vests	22	8	2	20	3	55
Trousers	21	5	2	22	6	56
Gloves, etc.	17	2	.....	44	2	65
Miscellaneous	5	1	1	21	1	29
Total	76	19	6	163	16	280
Per cent.	27.14	6.78	2.14	58.22	5.72	100.00

It appears from this table that of the 280 establishments 76, or 27.14 per cent., were in operation 8 hours or less daily; that 19 establishments, or 6.78 per cent., were in operation 9 hours daily; that 6 establishments, or 2.14 per cent., were in operation 9½ hours daily; that 163 establishments, or 58.22 per cent., were in operation 10 hours daily; that 16 establishments, or 5.72 per cent., were in operation more than 10 hours daily. The greater proportion of all the regular shops or places where others besides the proprietor were employed were in operation 10 hours daily.

CLASSIFICATION OF THE HOURS OF LABOR DAILY AND THE NUMBER OF EMPLOYEES IN EACH CLASS.

Industries.	8 hours or less.	9 hours.	9½ hours.	10 hours.	Over 10 hours	Total.
Coats	17	6	16	738	7	784
Vests	32	28	5	110	4	179
Trousers	31	6	6	222	13	278
Gloves, etc.	21	3	.....	53	2	78
Miscellaneous	6	13	4	293	1	317
Total	107	56	31	416	27	1,637
Per cent.	6.53	3.43	1.89	86.50	1.65	100.00

Of the 1,637 employees, 6.53 per cent. were employed 8 hours or less daily; 3.43 per cent. were employed 9 hours; 1.89 per cent. were employed 9½ hours; 86.50 per cent. were employed 10 hours; and 1.65 per cent. were employed more than 10 hours daily. By far the greater proportion of the persons were thus employed 10 hours daily. As to the hours in operation and of employment there was some variation as between the different industries, but this variation was hardly important enough to call for a detailed explanation.

NUMBER OF WINDOWS.

Industries.	No. windows	No. rooms.	Average.
Coats	84	672	8
Vests	60	166	2.77
Trousers	65	270	4.16
Gloves, etc.	65	139	2
Miscellaneous	39	262	6.70
Total and average	313	1,509	4.80

The preceding table shows the number of rooms which were used by the shops included, the total number of windows of the same and the average number of windows to each room. The windows being the means through which light for the workrooms is obtained and very often the only means through which ventilation is secured, are of considerable importance. Poor light in the workrooms usually means impaired eyesight; bad ventilation leads to poor health and loss of both physical and mental vigor.

In all there were in use 313 workrooms, having together 1,509 windows, or an average of 4.8 windows to each room.

The persons employed numbered 1,637. This makes an average of 5.23 persons to the room. A large proportion of the regular workshops were large and roomy, with plenty of both air and light. In many of the home-shops the situation was not so promising, though even here the conditions were not often really bad.

From the table it appears that "coats" comes first in the number of windows having an average of 8 to each room. This is accounted for by the fact that this occupation is mostly plied in comparatively large and well appointed shops. Miscellaneous is next in order and then trousers, and these industries or occupations are also largely carried on in regular shops. Vests, gloves and similar articles, on the other hand, are largely made in the homes by the so-called home worker. In such cases it is plain that the workrooms are not likely to be equipped by more windows than are usually found in houses occupied by working men and their families.

The tables which follow relate mostly to sanitary conditions. They show the air space of workrooms, whether used for living purposes as well as for workrooms, or connected with rooms used for such purposes, condition of closets, etc. These facts do not include everything that is necessary to know in order to show just what the situation is, but they throw a great deal of light upon it.

AVERAGE CUBIC FEET OF AIR SPACE TO EACH WORKER IN THE ROOMS OCCUPIED AS WORKSHOPS.

Industries	Number Work Rooms	Air space Cubic Feet.
Coats	84	774
Vest	60	1,006
Trousers	65	1,023
Gloves, mittens, etc.	65	1,250
Miscellaneous	59	720
Average	313	955

The above table shows by industries the average number of cubic feet of air space to each worker. In considering the situation as a whole it is found that the average space to each employe in the 313 rooms was 955 cubic feet. This is almost

three times as much space as has been regarded necessary for a good healthy workroom. It is certainly all the space that can possibly be needed if properly ventilated.

The largest air space was enjoyed by the glove, etc., workers. Next the trousers and vest makers are the most favored, while coat makers and miscellaneous workers had the least space.

NUMBER OF WORK ROOMS ALSO USED FOR LIVING AND SLEEPING PURPOSES.

Industries.	Living and Work Rooms	Work Rooms only.	Total.
Coats	14	70	84
Vests	33	27	60
Trousers	35	30	65
Gloves, etc.	64	1	65
Miscellaneous	7	32	39
Total	153	160	313

Here we find that 153 rooms were used for living as well as for workrooms and 160 were used for workrooms only. The home worker in Milwaukee as well as everywhere else nearly always performs his work where he lives. There are but few exceptions to this, and this is one of the greatest evils of sweating.

As alluded to already, the coat makers and miscellaneous workers were mostly employed in shops, a fact which is corroborated by the above table. Of the 84 rooms occupied by the coat makers only 14 were used as living rooms as well as workshops. In the case of the miscellaneous workers the relation is about the same, as is seen from the fact that 32 of the 39 rooms were used as workshops only. In the case of those who made trousers and vests over one-half performed their work where they lived, while practically all the glove makers were employed in the homes.

WORK ROOMS CONNECTED WITH LIVING AND SLEEPING ROOMS.

Industries.	Not Connected	Connected.	Total.
Coats	49	25	84
Vests	12	48	60
Trousers	25	40	65
Gloves, etc.	1	64	65
Miscellaneous	17	22	39
Total	104	209	313

It appears from the preceding table that of the 313 work-rooms, 104 were not connected with living rooms, while 209, or over twice as many were so connected. This table especially when read with the one that precedes it, throws much light upon where the work was actually performed. Nearly one-half of the work rooms were living rooms also, and of those which were not actually used for living as well, many were directly connected with such rooms, making the access to them for any purpose convenient.

ROOMS ENTERED DIRECTLY THROUGH SEPARATE DOORS AND STAIRWAYS.

Industries.	Through other rooms	Directly	Total
Coats	9	75	84
Vest	14	46	60
Trousers	16	49	65
Gloves, etc.	46	19	65
Miscellaneous	7	32	39
Total	92	221	313

While two-thirds of the work rooms were connected with living and sleeping rooms, if not all were actually used as such, it transpires from the above table that 221, or over 70 per cent. of the 313 rooms, could be entered directly from the outside or from the hall through a separate entrance. In nearly three-fourths of the cases the situation was, therefore, such that the work rooms could have been easily separated from the living room.

NUMBER AND LOCATION OF WATER CLOSETS.

Industries.	Basement	First Floor.	Second Floor.	Outside.	Total.
Coats	45	14	6	40	105
Vests	26	2	4	26	58
Trousers	27	4	2	32	65
Gloves, etc.	1	21	63	85	
Miscellaneous	17	1	21	39	
Total	115	21	34	182	352
Per cent.	22.67	6.00	9.63	51.70	100.00

Water closets are often a menace in crowded quarters and a source of many unsanitary conditions. For this reason the

location and condition of all such closets were ascertained. The above table gives the location and number of the closets for the 280 shops inspected. Over one-half of them were located outside and entirely separated from the shop, and one-third were found in the basement. The total number of the closets was 352, or about one and one-third to each shop.

ORDERS ISSUED.

Industries.	Coa's.	Vests.	Trousers	Gloves.	Miscellaneous.	Total.
Fire escapes					2	2
Doors, stairways, etc.					4	4
Affidavits for children	48	8	7		9	72
Permits for children	3	2	3	1	1	10
Registers for children	22	4	4		2	32
Ventilation, light, etc.	8	2	6	2	3	21
Closets, etc.	10	3	4	2	6	25
Cleaning, etc.	21	5	7	4	32	69
Total	114	24	31	9	79	237
Per cent.	48.12	10.13	13.04	3.82	24.89	100.00

At the inspection of the 280 shops in question, 237 more or less serious violation of the laws were discovered. Classified according to the industries affected, these violations stood as follows: Coats, 48.12 per cent.; vests, 10.13 per cent.; trousers, 13.04 per cent.; gloves, etc., 3.82 per cent., and miscellaneous, 24.89 per cent.

Classified according to the nature of the violations they stand as follows: Fire escapes, 2; doors and stairways, 4; affidavits for children under 16 years of age, 72; permits for children under 14 years of age, 10; registers or records of children employed, 32; ventilation, light, etc., 21; closets, 25; cleaning, painting, etc., 69.

All of these violations were ordered remedied; that is, the proprietors of the shops were ordered to set matters right, or to comply with the laws.

THE CONSUMER'S INFLUENCE ON PRODUCTION.

INTRODUCTORY.

A man's first economic function is consumption. If he were not a consumer, economically he would be nothing. The source of all his economic activities can be traced directly to the necessity of consumption.

On account of this necessity, or to supply the wants that prompt consumption, there has been developed an economic machine, highly perfected in parts, in parts exceedingly complex, and on this account characterized by certain well recognized defects. The purpose of this chapter will be to discuss the part of the consumer in this mechanism, to discover where the defects lie, the nature of the corrective force best suited to apply, and the place to apply it.

Because it was unnecessary to produce wealth, man at first was a consumer only. He became a producer when the intensity of his desire to consume prompted him—not because of the love of producing. Of the two forces, production and consumption, the latter has always been dominant; but their relative positions have been changed. A man now looks further into the future when producing. He has extended and multiplied his wants, but with them has also gained forethought. This has caused a reversal of the primitive rule of consuming everything in stock before going for more.

Thus saving is added as another important part of the economic machine. Consumption causes production, but there must be means of producing. A part of the result of one day's labor must serve as capital for the next. One economist even emphasizes saving so strongly as to call it the cause of production. Consumption is destruction—the satisfaction of those wants that instigated production being its justification. Saving demands a regulation of consumption and granting that saving is a necessary element, there should be a science in consumption as there is in production.

To thoughtlessness in consumption may be charged innumerable economic ills. Many persons seem not to have developed the element of forethought to as great an extent as have many of the lower animals. Yet that trait is undoubtedly more highly developed today than it was centuries ago; and it has been developing in the direction of unselfishness as well. "It is the spirit of the age," says Professor Marshall, "to give more attention to the question whether increasing wealth may not be made to go farther in promoting the general well being."

There seems to be no dispute concerning the statement there implied, that wealth can be made to go farther—that by thoughtless expenditure many, while not realizing it, are doing their share toward preventing a better distribution of wealth.

"The vital question," says Professor Patten, "is to decide what may be consumed so as to give the greatest sum of happiness for an honest day's work." That statement, made in regard to the individual consumer, may nevertheless be applied to society in general. From a selfish standpoint certainly no one could dispute that the object in spending is to get the greatest amount of satisfaction, or happiness. Everyone in making purchases or disposing of money in any manner must certainly believe at the time that the want in question is the greatest, all things considered, that can be satisfied by the amount of wealth with which he parts. Even the drunkard that puts his last coin into liquor must, at that moment, rate his craving for intoxicants above anything that he can get for his money. Judging such selfish wants from the social standpoint none would attempt to justify them. But some would perhaps excuse them on the theory that what a man earns is his to treat as he pleases. Morally such a theory has no standing. Yet like many so-called economic laws it has passed so long unchallenged that it becomes accepted as an axiom—so much and so abnormally developed and abused that the real element of moral worth has become almost entirely obscured. At first thought it may seem unreasonable to suggest that the fruit of a man's toil is not to be disposed of by him regardless of the desire or comfort of others. But why not equally well apply the same the-

ory to the use of a man's fist? It is looked upon as a perfectly proper function of society to prevent a man from using his wealth directly to injure another; why should indirect injury be countenanced—nay, even justified?

An astonishingly large amount of human misery may be traced directly to unwise spending. If economic society would insure mental as well as physical happiness, with the present facilities for production, equitable distribution would be the only problem—and wise and unselfish spending would go a long way toward solving it.

"Every act of spending that has as its result some physical or intellectual development of mankind," says Charles Gide, "should be regarded not only as being good in itself, but also preferable to saving." Of course the result of such spending is increased ability to produce, bringing still more to consume. But the importance of saving should not be overlooked. Only the crudest sort of production—if indeed it might be termed production at all—would be possible unless saving had first been practiced.

Saving, however, must not be construed so as to include hoarding. The miser is even more to be condemned as an enemy of society than is the profligate. But the margin of difference is not great. The man that with a lavish hand dispenses hospitality in the shape of sumptuous dinners confers upon society a greater benefit than does the miser, in this: That even by the wasteful banquet the participants are benefited—provided the excess does not work bodily harm—to the extent of a square meal; the miser's hoard benefits no one. He permits no one else to put it to good use for him; he serves simply as a vault in which gold is preserved until liberated by his death. "In respect to consumption," says J. B. Say, "prodigality and avarice are the two faults to be avoided." And that statement is just as applicable now as it was a century ago when it was made.

It may be said that production must equal consumption, hence the consumer is the benefactor of society. This is true enough, but it is not a justification for any and every indiscretion that may be classed as consumption. Says Professor Ely:

"It is extensive use that justifies great expenditures." Adam Smith said: "A man grows rich by employing a multitude of manufacturers; he grows poor by maintaining a multitude of menial servants." Such servants do nothing to increase the wealth of any one save indirectly by purchasing food, etc., which they would do in just as great a measure if they themselves were producing. Their time is thrown away. The employer of menial servants in greater numbers than is reasonably necessary may think he confers a benefit upon society by his extravagance. He does not realize that he would be doing just as great an economic good—and all things considered, probably greater—by going around smashing windows and paying for them to give idle men jobs.

J. E. Thorold Rogers says: "The larger the number of persons in a community who simply devote themselves to enjoyment, or expend their labor in supplying the wants of unproductive consumers, or the more wealth is accumulated in a few hands, the lower is the material condition of those who labor for the supply of that which constitutes the substance of all."¹

Concerning this problem of spending, Professor Alfred Marshall says: "The world would go much better if everyone would buy fewer and simpler things and would take trouble in selecting them for their real beauty, being careful, of course, to get good value in return for his outlay, but preferring to buy a few things well made by highly paid labor rather than many made badly by low paid labor."²

But here the difficulty arises. If people as a mass were brought face to face with the actual conditions, and elements in and surrounding the production of every article they purchased, human nature would assert itself and productive activities would without doubt undergo great changes. But this is not the case. Buyers seldom see back of the counter from which they purchase goods, and if in a few instances they do get glimpses of sweat shops and child labor it appeals to them only as a pitiful state of affairs toward the rectification of which the influence of the individual buyer can do nothing.

¹J. E. Thorold Rogers, Notes on Adam Smith, Book II, Chap. III.

²Principles of Economics, Book III, Chap. 2.

And then, the buyer usually has his own economic troubles. After he has deducted from his income the cost of a living such as the times and his position dictate, he has little left. Yet even if the buyer were to choose the simplest, best made articles today, paying perhaps the highest price, he has no assurance that his philanthropy has not benefited some opulent employer rather than a needy employe. The complicated industrial system is the cause of this. The buyer buys in ignorance, and the man that stands alone trying to sell his labor suffers from the same cause. He is also dealing with men much shrewder than himself in such matters.

The "entrepreneur," or industrial captain, stands in the position of the middleman, virtually the agent of the people in such dealings, and he finds that the more shrewdly he drives the bargain with those that are to do work for the consumer, the greater will be his reward. With him it is a question of surviving, just as much as it is with his employe. How long would his margin of profit be allowed him by the public were his bargain for his employes' labor to place him on a business footing unfavorable in comparison with his competitors for public favor? How long would he "hold his job" as agent for the people?

This brings in the question of competition—the life of trade and yet its death. When the germ of the present industrial system sprung up in England, it was fostered with great care by the government. Under Queen Elizabeth monopolies were granted in innumerable branches of industry, and the queen backed up these monopolies by passing laws that made markets for them. It was decreed, if the queen saw the need for developing a certain line of manufacturing, that the people must, for instance, wear caps of a certain make; to assist manufacturers of woolen goods one regulation provided was that the dead must be enshrouded in nothing but woolen. This policy started the building up of strong manufacturing industries and two centuries later it was hard to convince the English lawmakers that the continuation of the then highly developed mercantile policy was contrary to England's best interests.

When Adam Smith wrote, however, in the last quarter of the

eighteenth century, the tide had begun to turn and his strong plea for *laissez faire* made the changing current irresistible. Free competition was his hobby. Let men alone in their economic activities and the best ends of society and the individual would be subserved, he said. For a while that policy filled its place and England's manufactories did prosper. But the time came when the government deemed it necessary to intervene—to prescribe regulations limiting the power of the manufacturers. This time, however, the government's interference was in a different cause. The laws passed were in the interest of humanity, and especially benefiting those people that came directly under the influence of the factory owners. But England's factory legislation, now lauded as the most complete and perfect in the world, was long under the ban of public disapproval.

Thus in each step of advancement made in dealing with the industrial system the government has met with determined resistance, and often from the very source which was destined to be most greatly benefited by the changes. It was hard to convince the man of the Elizabethan period that by wearing calico caps he was doing his share toward making England the foremost commercial nation of the world. Neither could the manufacturer see how, when his monopoly had been so thoroughly established, that it would benefit him to have the government's protecting arm removed. And even with the great evils attendant upon the factory system in its early days, causing misery and abject poverty to thousands, it was a thankless and almost impossible task to convince people that the government was the proper party to intervene.

Today it is generally considered by economists as a proper function of the government to prescribe the straight and narrow path for manufacturers in regard to protecting employes and the public from direct injury through them. In the matter of prices and general methods of conducting business, however, public opinion has become almost universal in favor of freedom.

But the manufacturers themselves have been abandoning the maxim that competition is the life of trade and are now at-

tempting to limit competition by combination. This has brought on agitation in favor of government interference to prevent such combination in the interest of the public. This agitation is carried in some countries to a demand for government ownership of industries. Some considerable political parties point to that ideal as the only ultimate solution of the present political, social and economic problems.

But in regard to government influence in the conduct of industries privately owned there is much adverse criticism. "Those that decried competition," says Professor George Gunton, "are now decrying combination." There is, he says, an element of truth in both positions, but also, undoubtedly, much error therein. Present so-called monopolies differ from those of the Elizabethan period in that they have not a government guarantee. They are at least influenced by "potential" competition. They are a natural consequence of natural trade conditions—unhampered competition. If they control the market by virtue of better machinery, system or management, "from such an exclusive control there is no disadvantage," says Professor Gunton. The real source of cheaper wealth, he points out, is improvement in methods and machinery.

Competition is by A. F. Walker compared to steam or electricity. When controlled and restricted it is invaluable—uncontrolled, it scatters death and destruction. Unhampered competition is war, not peace. Mr. Walker further says: "The policy of undertaking, by legal barriers, to prevent the regulation of competition, has been fully tried and found wanting." J. B. Clark speaks of these combinations as the "result of evolution and the happy outcome of competition so abnormal that its continuance would have meant wide-spread ruin." They should, he maintains, be neither deprecated by scientists nor suppressed by legislators, but should be accepted, studied and, probably, regulated.

For another reason Professor R. T. Ely advises caution in interfering, with political weapons, in private business. "That," he says, "is the true source of corruption." If extensive legislative interference is inevitable in any business, Professor Ely regards that as a sign that that business should be

made a public one. Interference on behalf of labor is, he says, inevitable, but it should be confined chiefly to the protection of women and children and those naturally unable to help themselves.

Where then is the evil of these combinations? Why should the consumer be alarmed lest the "results of evolution" do him injury? The danger is not that aggregate social wealth will be diminished by this process. The danger is that those in charge of such gigantic producing concerns, and having thereby such great power over so many persons, will use that power to bring about inequitable distribution of wealth. If interest in the public weal were as great as self interest there would need be no regulation, no hampering of the great combinations. If then there is to be any regulating, its object should be to prevent avariciousness on the part of the great industrial organizers and at the same time to conserve the increased ability to produce, gained by the improved systematization. And in doing this there are two phases of distribution to be considered: First, are consumers of the particular product getting just returns for their money; second, are those employed in producing that product receiving a just share of the proceeds?

Competition was hailed as the solution of the price problem, but when its ruinous effects were seen, writers began to advocate potential, rather than active competition. It is still more or less of an open question, however, whether the possibility of new competitors entering a field is strong enough to hold a well grounded "trust" to a just level of prices. On the other hand this condition leaves an opening for blackmailers who would not hesitate to make money by threatening producers with active competition, in order that they might be bought off. Such competition must, of course, add to the cost of production; and the consequences will probably fall upon the consumer in the long run, although he may gain temporarily.

But from the employe's standpoint there cannot be that potential competition. There is no one standing ready to give a similar employment to the discharged or striking employe-producer, in the line in which he is proficient. He may be able to procure no work at all or he may be compelled to accept work

in which his lesser degree of proficiency will bring him a much smaller proportion of the net proceeds of society. Such a process would tend inevitably toward the lowering of the standard of employe-producers, both intellectually and morally.

Yet should the correction of such evils be left to the competitive system and the unencouraged sense of humanity or justice of the employer? In the one case some sort of coercion would seem necessary, at least until education could accomplish the change; in the other case, suppose the motives are right, a substantial backing is also needed.

If society organized as purely a political unit (i. e., government) is not the proper power to intervene for the purpose of giving such backing, then society organized as an ethical, moral or economic unit must be the one, either to solve the problem itself or to supply the existing deficiency to back the other forces.

But a human weakness intervenes. Society is not an organized unit from the standpoint of consumption. There is no social, economic, ethical or even political bond sufficient to direct the great body of consumers as a unit against the temporary self-interest of the individuals composing that body. Were there such a force, in the economic world it would be irresistible. Self-interest, however, becomes almost a passion when sufficiently encouraged by enticing bargains held forth as bait by competing dealers. That love of bargains is characterized by Mr. Isaac L. Rice as the one indestructible passion of the consumer. The desire to get something for nothing is a cousin to that trait remarked upon by Tacitus when he visited the ancestors of the present Anglo-Saxon and Teutonic races. They were inveterate gamblers, often staking their very freedom on a throw of the die. Today these same men would be speculators and their wives most persistent bargain hunters.

Among the women purchasers—representing in this capacity probably the greater part of the consuming public—is perhaps, from the standpoint of consumption, the field of greatest possibilities. But in this direction also lies apparently the greatest need for organized resistance to present conditions.

Yet the consumer himself is between two fires, In demand-

ing bargains he is compelling producers to draw more or less upon two principal sources—wages and profits. Self-interest will impel the industrial manager to draw first upon wages; when that source is drained and the strain upon profits becomes too heavy; production stops so far as that institution is concerned. But on the other hand, self-interest impels the producer to drain the consumer. The consumer, engaged in a fight of his own, can hardly be expected to fight battles for others; for after all the average man is kept very busy producing just enough to support those dependent upon him.

The whole process is war. Education is urged as the only proper method for solution. But is the trend of economic and intellectual activities as affecting each other, toward a more peaceful condition? Are not some artificial barriers—at least temporary—needed?

Competition, unless some other potent force takes its place, is perhaps needed to lend an impetus to the desire to improve methods of production. But that competition fosters in the consumer that passion for bargain hunting which compels one producer to win favor over the economic corpse of his rival; thus is combination presented as the only alternative, and then the question is resolved to war between producer and consumer, with the employe-producer-consumer getting it from both sides—an elastic bumper. Thus is the consumer unwittingly demanding more and more the elimination of wages and profits, hence the lowering of the intellectual and moral standard.

There is a danger pointed out by Professor Patten in regard to the natural trend and effect of improvements which make production more extensive and make it easier. The cheaper the food consumed—that is, the food requiring the least skill and capital to produce—the lesser the degree of intelligence required to do the necessary labor. In countries where such conditions obtain, Professor Patten says that people fall into two classes—the poor and oppressed, and the rich and the powerful; Egypt and the Southern states of the United States are cited as examples. On the other hand, where obstacles to production are greater, as in England and in the Northern states, no such division is found. There is need there for

higher average intelligence to overcome obstacles in the way of production.

If this be true, natural forces can scarcely be relied upon to insure a general increase in intellectual and moral conditions keeping pace with the increase of productive powers. What is the remedy? Says Professor Ely: "There is no one remedy for social evils. A multitude of agencies for good must work together. Private individuals and private associations of individuals must supply a multitude of these."

There have recently been many attempts to control consumption by legislation. These attempts have usually been made on account of some objectionable result attendant upon that consumption as, for instance, in the case of the liquor or the cigarette habit. But there is great doubt whether the legislative force is the proper one to use at present. Certain it is that without a public sentiment to sustain it, the executive department will ultimately fail in the attempt to enforce such laws. Experience with the so-called "blue-laws" furnishes sufficient evidence of this. Sunday liquor laws and others in that category invariably fail of enforcement unless public sentiment demands it. On the other hand, there is no more potent force in securing the passage and enforcement of such laws than public sentiment. This is true of all laws of importance, and especially has it been true of laws effecting people economically, when the benefits of the law are not immediately apparent.

If it were possible to enforce to the letter and in the spirit, any laws placed upon statute books it is by no means so certain that legislation could not overcome the existing evils of the social and industrial system. At least it is certain that many laws that do now exist could be made to go a long way toward ameliorating some bad phases of the system were those laws strictly observed. But it has been demonstrated that laws in advance of their times must wait until public sentiment calls for them. Education is needed again. But that education, to be most effective in this particular, should be of a practical nature. Perhaps it is true that in the search for knowledge in general, too little attention has been paid to the study of the economic side. Such knowledge should not be superficial. It

should form one of the fundamentals. Every young mind before leaving school should be started in a course of practical and philosophical thinking in regard to the position of every consumer and producer as affecting all others,, collectively and individually.

Political campaigns and speeches have their value as educating influences, but when facts and theories are distorted to suit party or personal whims, the results on economic thought and economic intellectual advancement must be very questionable. Partisan views make it much harder for practical, unbiased views to obtain, and such must predominate before progress in the right direction can be made. So much of economic theory should not be left to be determined and developed in such a doubtful manner.

Professor Gunton expresses fear lest the legislative arm, directed perhaps by ideas and opinions thus warped, in endeavoring to promote the best economic interests will jeopardize the very cause it seeks to aid. He says: "The hand of the public is now raised against the freedom of industrial enterprise, and we are in great danger in the next ten years of experiencing a class of legislation which may give our industrial progress a setback, the consequences of which nobody can anticipate."

In speaking of "competition and custom," John Stuart Mill touches upon a very important element not yet considered. He maintains that economists in general have been wont to lay too great stress upon competition as the great determining fact in prices, rents, profits and wages. Custom, says Mr. Mill, is a great agent here that is too much overlooked: "Custom is the most powerful protector of the weak against the strong; their sole protector where there are no laws or government adequate to the purpose. Custom is a barrier which, even in the most oppressed condition of mankind, tyranny is forced in some degree to respect."

It is true that "custom" is an ever present element in determining prices, wages, rent and profits. In the industrial history of England there was a stage when custom was such a predominant element that it is said to have been practically the only one in determining rents and wages. For generations

men held lands at certain rentals simply because their ancestors had done so, regardless of the value of that in which payment was made. Some of the gravest industrial disturbances of that country found their source largely in differences arising over "customary" rents and wages.

And what is custom? Custom is public opinion developed into common usage. It is possible that custom and public opinion may be quite directly opposed at some given time. The opposition of those forces may be so great as to cause revolution. But, given a certain custom and a certain public opinion concerning that custom at a given time, and the process of development from that time forth will be that of making the custom conform to the opinion. Custom of today may not be public opinion of today—it rarely is. Custom of today more likely conforms to the public opinion of yesterday. Neither is it at a standstill. They progress correspondingly, but with public opinion taking the lead.

The higher degree of average intelligence today causes ordinary custom to give way more readily than formerly before innovations; but that same intelligence should make possible the establishing of customs based upon sound principles, which should build all the more strongly the great barrier that industrial tyranny—whether it be tyranny of employer or employe, producer or consumer—should be forced to respect.

It is evident that the consumer has within him the latent force which is capable of almost unlimited possibilities in directing economic activities. The great problem is, how should he set about to accomplish his task? Which of the "multitude of agencies for good" does the consumer control? Certain it is that he should not go blindly at his task, trusting to impulse or "natural evolution" to put him on the right track if he desires to accomplish the greatest possible amount with a given amount of force. Says Professor Ely: "We are beginning to hear of a science of charity; and it is sorely needed, for old-fashioned alms giving is a curse." One kind of charity would confer a temporary benefit upon the object of that charity, but economically would result in nothing. There is another kind of charity—that which places within the power of the needy the

economic means of producing that which they need. The difference between those two systems of charity is the difference between the millionaire that spends his substance in giving free soup to all comers and the one that hires the same ones to produce utilities. Except for a very temporary relief, the money of one, so far as society—and even the particular members temporarily relieved—is concerned, might almost as well be poured into a fathomless sea; that of the other is reproduced in new form, in greater bulk and will in turn serve again its charitable purpose in an even greater degree. “It is extensive use that justifies great expenditures.”

Scientific charity may be merely scientific consumption. And were scientific consumption practiced with altruistic motives by society entire there would need be, for those physically able, no such a word as charity. This might seem to revert to the question simply of prodigality or prudence in spending, but it goes deeper than that. One may have all the prudence of a most cautious character, yet his good intentions might go entirely amiss. His consumption should be scientific. It should be based upon a thorough study and knowledge of economic conditions, and especially of production.

It is evident, first: That the great mass of consumers and producers have need of some system that will assure them an equitable distribution of a proper share of society's wealth; second, that those needful ones themselves possess the latent power to rectify matters, but third, that they have not solved the problem of so directing that power that it may accomplish that result.

There have been numerous associations organized for the purpose of attaining this object. These have usually been more or less local, either through design or force of circumstances; some have aimed to be of universal benefit, some of benefit to members alone. In the next chapter will be discussed the work of one that is of recent organization and which seeks to exert, to the extent of its ability, universal influence—The National Consumers' League.

THE NATIONAL CONSUMERS' LEAGUE.

The National Consumers' League defines itself as "an association of persons who strive to do their buying in such ways as to further the welfare of those who make or distribute the things bought." By judicious consumption and discriminative buying the members of the League seek to bring about an amelioration of the condition of the employes in factories and mercantile establishments, or of any persons connected directly with the production and sale of goods. For example, one of the first great and specific tasks undertaken by the League was the abolishment of the sweat-shop system of manufacture.

The National Consumers' League was organized May 1, 1899. Four state Leagues¹ joined to form this new organization, the object of which centralization is to promote intelligent and effective co-operation among purchasers in the various states. Within less than three years the number of affiliating state Leagues has been increased to eleven.²

All of these Leagues are of recent organization, with the exception of the New York City League. The starting of the movement in that city is due to Mrs. Charles Russell Lowell and Mrs. Frederick Nathan. In 1889-90 the "Working Women's Society" of New York made an investigation of the condition under which girls worked in that city. A mass meeting was called to make public the results of this investigation. The women attending this meeting were "amazed and horrified" at the revelations. A committee was at once appointed to make further investigations and prepare a list of shop-keepers that dealt justly with their employes. A "white list" of eight stores was soon established as a nucleus, and the society set out to correct some of the evils existing in stores not on the list. Among bad features aimed at were: The lack of seats for girl employes, no holidays, poor sanitation, etc.

In pursuing its aim to better the condition of factory employes, the League devoted its efforts during the first year to

¹N. Y., Mass., Penn., Ill.—Article by Nat. Sec'y, Mrs. F. Kelley, in *Independent*, Dec., 1889.

²Mass., N. Y., Penn., Ill., N. J., Ohio, Mich., Minn., Ky., Va., Wis.—Mrs. F. Kelley in letter of Aug. 8, 1901.

factories producing white muslin underwear. As an inducement to those manufacturers that would comply with the requirements of the League, the latter offered to broadly advertise such facts. Success was most rapid in Massachusetts, which state was already equipped with strong factory legislation. All the underwear factories in that state soon complied with the required conditions. Many factories in other states, however, held out, often requiring but one concession that the League was unwilling to make. For example, one firm wanted permission to run six weeks overtime every autumn; another worked its cutters from 7 to 8 o'clock p. m. four months in the year. Such requests usually came from states having inferior factory laws or else deficient enforcement.

The League does not rely on rigid rules or pledges to hold its members in line, depending rather on "moral 'suasion." Each local league makes its own regulations as to membership. The influence of the Consumers' League is not, however, confined merely to these members. There are large numbers of correspondents, one to a city or town, who canvass the stores, address meetings and report regularly once a month to the New York office. In many places, also, the League furthers its ends by means of women's clubs that have standing committees which, on a larger scale, carry on this work of the correspondents.

The machinery of the League is not, therefore, intricate. The essential parts are the national secretary in New York, the various state and local leagues, the correspondents and the committees of inspection. The latter are necessarily an important factor, for upon their findings in the various cases investigated depends in large measure the position of the league toward those cases.

The League has been steadily increasing the number of factories on the so-called "white list." On Sept. 8, 1901, such factories numbered 29, they being located not only in the East, but in the Middle West and Northwest as well. Three months later the number had been increased to 33, some of the additions being considered very important ones.

The only material weapon used by the League is the "white label." This is the official registered badge, the right to use which is conferred only upon those manufacturers that comply with all the conditions prescribed by the League. In the center of the badge is stamped the name of the League, and just under this the license number of the firm in question. On one side is printed: "Made under clean and healthful conditions;" on the other: "Use of label authorized after investigation."

The purpose of the label is primarily to serve as a guarantee to purchasers that the goods they are purchasing are made under conditions that the Consumers' League is willing to indorse. The four general demands made upon manufacturers in any state by the investigating committees are as follows:

- "1. That the state factory law is obeyed.
- "2. All the goods are made on the premises.
- "3. Overtime is not worked.
- "4. Children under sixteen years of age are not employed."

The local leagues have been more or less active in securing legislation in the various states, which would aid in bringing the factories up to their requirements. These requirements vary with the different Leagues in matters of detail. In general the National Consumers' League does not enter into the matter of wages, confining its efforts principally to bettering the physical surroundings of the wage earners, improving the mental and moral atmosphere and restricting the hours of labor. Some local Leagues, however, attempt to cover a broader field. The New York City League, for instance, among other things prescribes a minimum of wages that shall be paid to employees in houses that are placed on the white list.¹

¹Following is the standard of a "Fair House" as set by the New York City Consumers' League:

Wages.—A Fair House is one in which equal pay is given for work of equal value, irrespective of sex. In the departments where women only are employed, in which the minimum wages are six dollars per week for experienced adult workers, and fall in few instances below eight dollars.

In which wages are paid by the week.

In which fines, if imposed, are paid into a fund for the benefit of the employees.

In which the minimum wages of cash girls are two dollars per week, with the same conditions regarding weekly payments and fines.

Hours.—A Fair House is one in which the hours from 8 a. m. to 6 p. m. (with three-quarters of an hour for lunch) constitute the working day, and a general

Concerning the need for remedying the evils that brought the Consumers' League into existence there is no difference of opinion. Repeated investigations have served only to emphasize that fact. The conditions under which many men and especially women and children work in factories and mercantile houses are not, however, so fully realized by the consuming public as might be expected. The evils of the sweatshop and the drudgery and depressing influences of the condition of employment in many retail stores are read of or perhaps witnessed by many that directly or indirectly patronize such establishments; yet few of these realize to what extent these circumstances are fruitful of human misery.

The sweatshop system proper is confined to a few of the larger cities of the country. The system is not a result of evolution following the development of the factory system. It ante-dates that. It is a relic—and much abused one—of the domestic system. In that system the home is the factory as well, and as it exists in the populous tenement districts today the queer combination of parents, children, household paraphernalia, invalids, disease germs and clothing being made for people in all walks of life is found all huddled perhaps into a space large enough for one fair-sized room. The light, ventilation and surroundings withal are often such as to unfit these habitations for any kind of life that does not thrive on filth. Yet in these places strenuous work is done, continuing often

half-holiday is given on one day of each week during at least two summer months.

In which a vacation of not less than one week is given with pay during the summer season.

In which all overtime is compensated for.

In which wages are paid and the premises closed for the five principal legal holidays, viz.: Thanksgiving Day, Christmas and New Year's Day, Washington's Birthday, and the Fourth of July.

Physical conditions.—A Fair House is one in which work-, lunch-, and retiring-rooms are apart from each other, and conform in all respects to the present Sanitary Laws.

In which the present law regarding the providing of seats for saleswomen is observed and the use of seats permitted.

Other conditions.—A Fair House is one in which humane and considerate behavior toward employees is the rule.

In which fidelity and length of service meet with the consideration which is their due.

In which no children under fourteen years of age are employed.

for 15 or 18 hours out of the 24, and prices paid for the work are inversely, rather than directly proportional.¹

Much of this life is hidden from the public, but many circumstances almost as deplorable, surrounding employes in innumerable department stores and large mercantile establishments, although more apparent, seem to excite but little more practical sympathy. A student at the University of Chicago undertook through actual experience to gain a knowledge of the conditions under which employes work in some of the larger, although not most reputable, department stores of that city. She spent one week each at two such establishments during the holiday season. Among her strongest impressions of those two weeks were: Great physical strain from standing, abuse from overseers if seated, great rush during meal times, filthy and gloomy cloak, toilet and lunch rooms, ill treatment of exhausted and sickly employes, inadequate pay² and the consequent moral degradation.³

It will be seen that both economic and ethical causes had bearing upon the organization of the Consumers' League; and it aims to accomplish results along both lines. Through economic improvement the League hopes to effect ethical advancement and to bring about economic improvement through the consumer, ethical motives are required.

The necessity for two branches of work thus becomes apparent—the one to develop the ethical sense in the consumer, the other to provide the necessary economic weapons in order that

¹Following are some of the prices paid for sweatshop work: Cambric dresses and waists, lined and trimmed, at \$1.20 per dozen; silk waists, 98 cents per dozen; women's wrappers, 49 cents per dozen; neckties, \$1.25 per gross; percentages deducted for boss sweaters and for cartage.—Maud Nathan in *No. Am. Rev.*, 166 250.

²Miss McLean's pay was for the first week \$2 plus 5 per cent. commission on sales, making a total of \$4.95. Her fines and living expenses were \$4.79. The second week at another store she earned \$4 salary and 1 per cent. commission; total, \$6.39. Fines and expenses were \$6.05. In return for evening work, she was given supper. Miss McLean worked 175 hours in two weeks, earning a little over 6 cents per hour. These expenses included nothing in the line of clothing. Miss Anne McLean in *American Journal of Sociology*, May, 1899.

³"It was an openly acknowledged fact among the girls there that the paths of dishonor were traversed to supplement their small incomes. . . . The girls themselves said that more than a third of them were leading lives of shame."—Miss McLean in same.

the developed ethical sense may also become a physical fact. The consumer must be made to recognize his moral responsibility for all conditions under which goods are made and sold, then he must be given some means of rectifying the evils existing therein.

"The League," says its president, Mr. John Graham Brooks, "has two invaluable services: (1) To everyone that cares, it can through its label offer a definite opportunity to buy goods in such way as to create and enlarge the area on which the toilers do their work in hope and not in entire despair. (2) The beginnings must take the form of voluntary associations working slowly and patiently to arouse and direct a body of public opinion, without which the law can neither begin nor be effectively enforced when it has begun."

At first thought it may appear far-fetched to tell the consumer that if the coat he buys is made under conditions hurtful to the producer, the purchaser is to be blamed. He naturally turns the blame upon the man that employs these producers and this man in turn refers you to the competitive system which is forcing him. You say that you are not responsible for that system, which is true. It is a result of evolution. But the fact remains that what you buy you help make. To the extent of your purchases at least you are helping to maintain the competitive system, and to maintain it unrestricted.

The Consumers' league does not demand that competition be eradicated. It demands that a limit be set upon it. It demands that each factor in the competitive system assume in his calculations a respectable living for even the humblest producer in that system. It now attempts to discover which of the factors do calculate this, and to encourage them by providing for them a considerable and steady demand for their goods.¹

¹The *modus operandi* of the League is: 1. "To investigate existing conditions of production and publish the results of its investigation. 2. To guarantee to the public goods found to have been made under conditions satisfactory to it, by attaching to them its label. 3. To appeal to the conscience of the purchaser as an offset to the continual appeal of advertisers to the credulity and cupidity of the public. 4. To co-operate with and encourage in every legitimate way those employers whose work is done under humane and enlightened conditions. 5. To procure legislation for the protection of purchasers and employees. 6. To co-operate with officials whose duty it is to investigate the con-

State laws bearing upon such points are not uniform. Hence standards differ in different localities. A consumer can neither be expected to have knowledge of the laws of all the states in which the goods he purchases are made. He does not know whether the laws there are efficiently enforced and if they are he does not know whether those laws comply with the standard he wished to see maintained. The Consumers' league attempts to impose practically the same conditions on producers and distributors of all parts of the country and thus enable well-meaning purchasers to buy as they desire.

And some mark is necessary to designate the goods properly produced. Even the highest priced goods may be made under conditions as bad as those surrounding the manufacture of the cheapest. The germ-infected sweatshop of a large city may be the producer of a valuable "tailor made" garment ordered from measure at some city hundreds of miles away.¹

One of the first objections naturally arising in regard to the use of goods rightly made was the inability of the purchaser to get attractive wares. At first white label goods were of a lower class but it is maintained at present that the label goods are as good as any in the market with the exception of some of the French hand made articles.

But perhaps the greatest problem would be to overcome price competition. In the manufacture of white label goods more is done for the employe-producer than in most other instances. That would necessarily mean a greater aggregate outlay in that direction. If the resulting price is to compete with that of goods made under conditions less favorable to the employe, who must stand the loss? Will the capitalist be willing to have his profits reduced by that amount? In some cases, no doubt he would, but the basis for such an improvement would then be purely ethical. To accomplish permanent results and in the

ditions of production and distribution, or to enforce laws and ordinances dealing with those conditions. 7. To form organizations of purchasers for the purposes above set forth."—Mrs. F. Kelley in *Am. Journal of Sociology*, Nov., 1899, on "Aims and Principles of Consumers' League."

¹Mrs. Kelley tells, for instance, of coming across a \$60 or \$75 overcoat, hanging in a Chicago shop recently exposed to small pox. This coat had been made to order for a Montana man, who had ordered at home a "custom made" coat—Mrs. Kelley in same.

least possible time, there must be an economic basis. What applies to one must apply to all.

We have taken for granted that there would be a permanent loss, but that presumption may be superficial. The Consumers' league maintains that it is so; that by means of fine machinery, complete organization and intelligent labor and administration a factory may compete successfully with producers that lower prices by holding down labor and through the sweating system saving the expense of heat, light, and machinery maintenance for employees.

As a matter of fact, it is claimed that factories using the label do not sell their products at prices correspondingly higher than those not using the label. Articles of a cheap as well as of a high grade are to be found bearing that guarantee; indeed an investigation of the price question has showed that goods of very moderate price are now made under better conditions than the costliest articles on the market. The statement is made by Mrs. Kelley that more of the label goods, as a rule, are worn by poorer girls than by women who demand the more costly qualities.

In many cases where extensive manufacturers have objected to the League's rigid rules, there has been merely some slight point of difference, having perhaps no effect upon the cost of production. One of the large middle western underwear manufacturing concerns, for instance, stood out for a long time against the label. Only one thing prevented the company from obtaining it, and that was the fact that the factory worked overtime when rushed. This firm has recently taken the label, however.¹

The reason for overtime work during winter was the necessity for supplying goods to merchants for their January special sales. These sales have become customary and the purchaser would attach the blame for them upon the merchant. But that

¹Mrs. Kelley stated at Madison on Dec. 6, 1901, that within a month the label had been granted and that 500 employees would not, therefore, be compelled to work evenings during winter as was customary. One experienced hand told Mrs. Kelley that every girl would have done as much work by Easter, anyway, because they always slacked up in the afternoon when they knew night work was ahead of them.

is a matter wholly within the power of the consumer to rectify. If sales were not heavier at that season, there would not be such a sudden heavy demand on the manufacturers. One season would suffice to break up that custom.

As to manufacturers in general and their position toward the white label, they "constitute the least of our difficulties and one of our greatest helps."

As to the willingness of merchants to handle white label goods, it would seem that there should be no trouble providing profits are not disturbed. It would be very poor business for a merchant to refuse to handle goods his customers demanded for merely whimsical reasons. But the merchants themselves are consumers as viewed from the manufacturers' standpoint, and as such it seems that they are in need of something to guarantee them in their turn, properly made goods. Unless they have some substantial backing when making demands upon manufacturers, and some economic incentive to make the demands, they could hardly be expected to be very persistent. To show the merchants' position Mr. Brooks quotes the manager of one of New York's most prominent stores as follows: "If there is any way of inducing a goodly number of buyers to study the question and act as if they cared, we could find out about a great many of our goods of which we are now ignorant, but they never seem to care in the least."

Mrs. Kelley states that retailers are very willing to carry label goods, sometimes even ordering them without waiting to be urged by the League; and of course buyers are always anxious to build up their departments by ordering any class of goods for which there is demand.

One of the declared purposes of the League is to co-operate with officials in the various states, in order to assist in the enforcement of the laws beneficial to the employe-producers. It seems, however, that thus far such a general co-operation has not been accomplished,¹ although in some cases the League and state officials have been of considerable assistance to one another.

¹Mrs. Kelley states that the Massachusetts and Wisconsin factory inspection departments are as yet the only ones that have afforded valuable assistance to the League.—Letter, Sept. 8, 1901.

THE CONSUMERS' LEAGUE IN WISCONSIN.

The Consumers' league in Wisconsin is in the third year of its existence. It was instituted in this state through the efforts of the State Federation of Women's Clubs which first became interested in the movement in 1899. At the convention that year the Federation appointed a committee to co-operate with the Consumers' league. The National Federation of Women's Clubs met in Milwaukee in June that same year, and in the session that was given to the discussion of the Consumers' league was aroused the interest which prompted the organization of the Wisconsin league on the following day.

The membership of the state league is composed of women from various cities in the state, and there are also in the state some local leagues of importance, Milwaukee and Oshkosh being most prominent in this respect. As for the state league, its idea was to commence the extension of its influence through the medium of the club women, churches and educational forces. Among other things the league undertook to give support to certain proposed legislation affecting factory inspection and the licensing of home workers, which measures were enacted. The only very large local League in the state is that at Milwaukee where almost from the beginning the membership was 300 and the tributary shopping list, 200. These 500 women were pledged to further the League's interests in general, but the first important and specific effort was to be to stop Saturday afternoon shopping in order to give employes of the large retail establishments a weekly half holiday. A systematic canvass of these stores was made and 62 were eventually put upon the list of those that agreed to close as requested. A few needed no urging, but considerable personal work was necessary to persuade many others to comply. One store held out at first but the women made the street "so lonesome Saturday afternoons" that that one very soon surrendered.

The Milwaukee League adopted a method of increasing its membership and still more increasing its influence, which accomplished considerable in this line. The annual membership dues are \$1, but the League voted to give one membership

vote to ten women who should pay ten cents each. Such members would naturally take more interest than if they were mere members of the shopping list auxiliary to the League.

The Oshkosh League was the second one organized. This League made a strong effort to get merchants to handle label goods as well as to manage their stores in accordance with League regulations. The Oshkosh League attempts to guarantee in a way a market for label goods.¹

These two leagues serve as examples of the trend of the work in Wisconsin. Comparatively speaking, as to membership throughout the state, merely a start has been made although in a few places the League has memberships which should give it considerable influence.

In order to ascertain concerning the effect of the efforts already made by the League in this state as well as concerning the nature of the field here open to the League, inquiry blanks were sent out to prominent merchants and manufacturers in the largest cities. Many and diverse answers were received. It is among the merchants that most of the work has been done, but considering the state as a whole, it seems evident that the unworked field is not only large but quite susceptible also.

The merchants who responded to the inquiries were quite evenly divided as to acquaintance with the white label through use. Most of those that have never used it profess entire ignorance concerning it. A prominent department store manager in one of the largest cities says: "I can only say that after thorough inquiry, I never heard of the Consumers' League or their label and I cannot find anybody who has. It is of no possible earthly interest to us in any way."

One merchant states as his reason for not carrying a stock of white label goods that there are not enough lines on the market to keep up such a stock. Another merchant says that he handles the white label goods when he can get them and has done so for three years.

¹Most of the members of the Oshkosh League signed the following: "Each of the undersigned intends to purchase to the amount set opposite her name, goods bearing the label of the Consumers' League, during the coming year, if a reasonably large stock to select from can be found in the city."—Second Annual Report, National Consumers' League.

As to the demand for white label goods being sufficient to furnish merchants any substantial backing in handling them, even those that make a practice of carrying the goods regularly appear to agree that as yet there has not been enough persistent demand to be notably appreciable from a business standpoint. A merchant in one of the cities where one of the older Leagues is located, however, says that there is such a demand there, while in another city a merchant who has handled white label goods for several years says that the only substantial backing he gets is from a conscience satisfied. That same merchant is the only one that says he has tried advertising label goods sufficiently, in his judgment, to test the matter. He agrees with all others answering that question, that the advertising done by the League itself has not been of special benefit to those handling the approved wares.

The merchants in general appear to agree upon the advisability and justice of many of the general regulations prescribed by the League. For example, most of them advocate giving employes an annual vacation and also a half holiday per week. One natural objection to the latter rule is that all competing merchants often cannot be persuaded to do likewise. Still another objection is made, however. One merchant finds that most employes abuse the holiday privilege so as not to deserve it. They overdo themselves during the intermission from work, he says, so that they are unfit for duty when they report on Monday morning. Another merchant says the holiday rule is impracticable for him on account of the class of customers he serves.

The following quotations from various replies received from merchants in different parts of the state will serve to show how men in the business that is, or would be, affected look upon League requirements as they know them:

"On account of depriving the consumers of the convenience of trading where they most wish, it is detrimental."

"It has not membership enough here. It should be useful, and intelligently handled would be a power for good."

"We consider agitation of this kind beneficial if correct business principles are used in its application."

"I do not think the League's influence is strong enough to accomplish permanent results because the majority of League members when buying anything for themselves look for the best value regardless of label, while urging their neighbors to insist upon the white label regardless of price. Anything the League can do to relieve the horrid condition of the unfortunate poor who work in the sweat-shops of the large cities is a noble work and should receive the support of all merchants and others; but when they attempt to extend their influence to small places where such conditions do not exist, and where employer and employes are friends and neighbors, they are a disturbing element and work harm to all parties concerned and good to none."

"I think the League's influence is sufficient to bring permanent improvement. The general results of the League's work are, I believe, beneficial, in that attention is given matters that are often wrong."

"There is too much talk and too little real merit in the movement."

"The League's work could be beneficial with the assistance of the public and enforcement of the laws where evils exist. Get the great army of consumers with you in your efforts to suppress the sweat-shops, and your success is assured."

"The sentiment of our best customers is strongly in sympathy with the movement. We hope that the League is strong enough to accomplish permanent results."

As to the manufacturers in the state, their condition in respect to the League and its label is comparatively one of almost unalloyed ignorance. Inquiries were sent out to manufacturers of underwear, knit goods, cloth, etc., these inquiries including all manufacturers in the state making goods of a class similar to those manufactured by firms elsewhere, which have been granted the use of the label. Of all these manufacturers but one reported that it uses the label. That one had used it for about two months. The other firms seemed, with a few exceptions, to be ignorant even of the fact that there is a Consumers' League in existence.

One knitting firm replied: "We have had no experience whatever regarding the use of the Consumers' League label."

A manufacturer of ribbed underwear says: "We do not know the Consumers' League, their methods nor anything about them; our ignorance is dense."

A hosiery company writes: "We know nothing other than hearsay regarding the Consumers' League."

One cotton cloth manufacturer says: "We have not interest enough in this to look into the subject and so long as they do not interfere with our business we shall not with theirs."

Another says: "We are entirely ignorant of the existence of any Consumers' League label. We cannot be in any way affected locally."

A woolen manufacturer writes: "We may not be up to the times, and probably are not, when we have to acknowledge our ignorance in stating that we know nothing whatever of this matter."

Another says: "We never had it presented to us. Please advise us fully regarding this League. Who furnishes these labels, etc.?"

A manufacturer of knit goods who says that complying with League regulations would not increase the cost of high grade knit goods, adds: "The use of the label is not granted to manufacturers of knit goods who are anxious to use it. We have made application twice. We want to use it but cannot secure it." This manufacturer maintains that the League does advertise enough to make the label desirable to manufacturers.

A linen manufacturer says: "We have no call to use the label. It would not be practicable on our goods." As to increasing cost of production, however, he adds that there should not be much difference.

"We have never used the label," says a woolen manufacturer, "because it has never been called to our attention. Have heard of it only in a general way. It has never been presented to us as applicable to our line."

Says another knitting firm: "Our attention has not been called to it. Would probably use the label if we were asked to do so." The same firm expresses the opinion that compliance with regulations would not increase the cost of production in its factory, although it would make it impossible to keep up with orders at all seasons of the year.

Most of the manufacturers that expressed an opinion upon the annual vacation and summer weekly half holiday rule of the League appeared favorable to it. One objected on the ground that his help did not ask it. Another, whose employes are out every Saturday at 4:30 p. m., states that the rule would be very undesirable to him.

The following statements come from two manufacturers that have had experience in this line:

"We consider it practicable. We close our mill on Saturdays at 5 p. m. the year round; also close it up for two or three weeks for mid-summer vacation."

"We tried it one summer. It worked all right. We shortened the nooning 15 minutes. The next year the help did not care for it."

The only manufacturing firm in the state which reported that it does use the label speaks from an experience of only a few months. Judging from that experience, the manager states that he believes the League's influence is valuable, its aid in the advertising line desirable, and that the label serves as a guarantee of goods. In regard to the holiday and vacation rule, however, he believes it impracticable unless universally observed, which is the only criticism he offers.

CONCLUSIONS.

An analysis of economic conditions has shown that some additional economic force is needed. Something in the interdependent mechanisms of production, distribution and consumption is out of order. Whatever the difficulty, it seems not unreasonable to assume that the most thorough-going reform would begin with consumption itself, inasmuch as the necessity or desire of consumption seems at bottom the cause of all economic activity. The question that concerns us is simply this: Is the Consumers' League, as judged by its experience thus far, the proper force to apply at this point?

To answer this question must be considered: The composition of the League, its membership, its hold upon members, its method of work, whether it is sufficiently energetic to keep

enough label goods on the market, whether its inducements to manufacturers and merchants are sufficient, and whether its efforts are bent in the direction which is calculated to give them the best results.

With the exception of a few honorary positions, the Consumers' League is a movement confined to one sex so far as membership is concerned. But confining the movement to women does not in the least hamper the League in the line of work it has undertaken. Its great effort is to better the conditions surrounding the men, women and children who work on goods made to be sold to women, and as women do the great share of the buying of goods for household and personal use, the sphere in this respect is as yet practically unlimited. There are no restrictions that from their nature prevent the movement from being a universal one. The fact that the active membership is entirely of women should indeed make it the easier for the League to do its work, as it permits uniformity both as to Leagues in general and as to methods of procedure in any local League.

The League by appealing both to the economic and ethical sides has succeeded in interesting many influential and extensive buyers, many that through their positions alone are able to accomplish things that would be impossible to persons of less importance as judged from the standpoint of the manufacturer or merchant. And the influence of many of these consumers could not be brought to bear through any means other than those employed by the League. If the League's program is carried through logically and thoroughly the consumers may have the satisfaction of quieting their aroused consciences while experiencing little or no material inconvenience or loss. For this function the League seems peculiarly well qualified.

There are two directions in which the League must be very active in order to be most effective—interest among members must be maintained, and it must be rendered possible for these consumers to procure the goods they desire. The danger in this direction is illustrated in the remark of the Wisconsin merchant concerning the attitude of League members. He thought members were inconsistent in that they urged their

friends to buy only label goods while they themselves persisted in hunting out the best bargains and taking advantage of them regardless of the label.

Of course, from the ethical standpoint a person would not be justified in patronizing the firm that did not treat properly its employes, providing there is some practical way out of the difficulty. If forced to answer the question whether she cares to obtain cheapness at the expense of increasing the misery of the wage-earner, the consumer would no doubt reply negatively. It is for the League through its educational system to bring this question sharply home to the consumer.

Another objection from a Wisconsin merchant is that the freedom of the purchaser is taken away. Economically and morally that objection should stand on the same footing as would an argument for license as opposed to simple liberty. But even granting the force of the objection, it would not be a valid one, were the League sufficiently well organized and active enough in educating producers and conferring the label. If there are enough firms using the label there would be latitude enough for the buyer without going outside the ranks. And because this extension cannot be accomplished in a day is no valid argument from any standpoint for justifying a purchaser who has the means in deliberately refusing assistance to such a worthy cause. Yet, it is perhaps easier to defeat the argument by getting rid of the condition which suggests it.

Success with the League has been most rapid in the state of Massachusetts. The system of factory inspection, backed by competent legislation, has made that state an exceptionally favorable field for the League's operations. The fact that public sentiment there upholds such laws would indicate also that the people there are quite in a condition to accept and aid in the promulgation of the League's doctrines.

We have seen that the great question of remedying evils through the law arises out of the difficulty of enforcing them; that in order that they may be efficiently enforced there must be back of the executive power a positive and predominating public opinion favoring such laws. Given that backing, the great stumbling block in the way of remedy through the law is

removed. And it is by working up such a sentiment, by assisting the state officers in this manner, that the League can do perhaps its greatest good. The legislature may pass laws, the judiciary may pronounce them constitutional, the executive may try to enforce them, but none of those three powers can force into existence the public sentiment that is so vitally important. But a great body of organized consumers adds the element without which the law is powerless—that enormous indirect pressure, which not only assists the law but gives direction and definiteness to the reform movement of which the law is merely the formal expression.

In another way, also, the organized movement is enabled to supplement the work of the executive arm, by rewarding those who fulfill requirements, and not only rewarding them pecuniarily, but by rewarding their better natures, by giving them the satisfaction of knowing that their efforts are appreciated. Illustrative of this fact is the incident related by Mrs. Kelley at Madison, December 6, concerning a certain eastern manufacturer who had just built a new factory which he had fitted out in the most approved manner. Immediately after he moved into these fine quarters, his employes went out on a strike. The employer regarded this demonstration as an evidence of ingratitude, but he was piqued even more by the attitude of the consumers in his vicinity, who showed not the slightest appreciation of the effort that had been made to improve the comfort and surroundings of the employes. The League women undertook to show their appreciation and the result was a much better feeling on the part of the manufacturer toward the cause.

Although Wisconsin conditions should not be taken as a criterion of the efficiency and persistency of the League, the condition of this field will serve to indicate in what line the League is likely to accomplish most. No state offers more striking evidence of the fact that enlightenment and co-operation are necessary elements of success in the work. One merchant says the League should not meddle where its influence is not needed; a manufacturer says he knows nothing about the League but would probably use the label if asked to; another says he is anxious to get it, yet cannot. It seems that the manufacturers as a class are

ready to consider the matter of using the label and that the merchants would interpose no objection; certainly the consumers should have none to make if their purses are not affected. As individuals, most manufacturers and merchants appear to agree on the questions of principle involved, but they are of necessity compelled to take into account competition and customers; and if there is no portion of the latter ready to give consistent support, the producers, acting in reality as agents, cannot but submit.

It is, then, as an educative force that the Consumers' League would appear to have widest scope. It has the power to reach and develop public opinion in a way that legislators and officers are unable to do. Both the producer and the consumer are brought to think of the disease and not stop at symptoms. Although laws can do much, laws cannot long precede public opinion; in the end they must follow it. The Wisconsin bureau recently had an illustration of this fact. A manufacturer that had several times been reprimanded on account of infringement of factory laws, and who persisted nevertheless, was finally brought into public notice through proceedings started by the bureau. He soon admitted himself beaten and ascribed his defeat to the fact that the publicity was threatening to take away many of his best buyers. In this case no organized League was back of the movement, but its outcome indicates clearly that when a producer finds that he must deal with people who are doing hard thinking regarding his methods and the methods of every producer in competition with him, that fact does influence him and influences him strongly. The Consumers' League in working through women's clubs, committees and correspondents, can reach great numbers and can bring pressure to bear in almost every quarter.

But in any such cause tangible results are needed to keep up interest. People want to see that their efforts have really accomplished something. The League must through thorough advertising and by persistent educational work keep its present members interested while making efforts to get new ones. Working consistently in this direction, this organization would seem to have the qualifications for filling a place that no other factor in the economic world has been able thus far to fill.

PART IV.

A Study in the Population of Racine, Richland, and Crawford Counties.

INTRODUCTION.

The compilation and publication of state and local records is one of the most important services that can be rendered in the field of historical research. Wisconsin has much unpublished manuscript material which has lain unused for many years and which it is the purpose of the present theses to bring to light and render available to every one. The papers published at this time represent some careful detailed work with the copies of the original U. S. census returns for 1850-70, in the office of the Secretary of State. Some of the results of this investigation are soon to appear in the current volume of the report of the Wisconsin Academy of Sciences and Arts. The purpose in this work has been to make use of the requirement of senior theses in compiling and using the material given in the above mentioned census reports for the various counties and towns of the state. Altogether the towns in the counties of Dane, Racine, Kenosha, Dodge, Iowa, Richland, Columbia, Crawford and St. Croix have been studied and the statistics worked over into tables and charts and maps so as to be available for the use of those interested in local history. The soil and topography have in each case been worked out by towns to form a physical basis for the discussion of the population. The people of the towns have been classified as to nationality, wealth and occupation. The rise and decline

of the various nationalities in each town has been found, and the connection between the economic condition and politics has in some cases been stated. Two theses of the current year have dealt more fully with the question of the settlement and spread of Germans in the state. The Germans in the counties of Dodge, Jefferson, Fond du Lac, Ozaukee and Washington were grouped according to the portion of Germany from which they came, and the location of these groups was pointed out by towns.

In general the studies so far have shown the possibilities in such original investigation and prove how valuable co-operative thesis work can be made when properly directed upon subjects of intrinsic importance. The movement of population across Wisconsin from east to west, the changes in predominant nationality that take place in the total population of the counties and towns from 1850 to 1870 clearly indicate that in such studies must be sought the real foundations for generalization regarding the westward movement of population in the entire northwest. The time has past for the crude guesses and startling half truths with which many of the earlier writers have astonished and delighted their readers. There is left for us to work out carefully and scientifically the slow and steady transformations that produced the Wisconsin of 1890 from the Wisconsin of 1850 or 1870. The laboratory method alone can be trusted in so important a task as this. The last problem upon which two students are at present at work may be stated thus: By what routes did the different nationalities and the natives from the several states enter the counties of Wisconsin, and second, what part of the actual population left the towns and counties from decade to decade? With the answers to these two questions, the first rough sketch of the study of immigration into Wisconsin may be considered as fairly complete. The published theses give little hint of the magnitude of the labor involved in producing the tables of totals and percentages that form so large a part of each paper. The students who have taken part in this seminary work showed the genuine scientific spirit and persisted with admirable determination to the end of their laborious tasks.

I desire to acknowledge the courtesy of Secretary of State Froelich in loaning to the State Historical Society the volumes

of the census reports, 1850-1870. The material was thus rendered easily accessible to each member of the seminary and the very best results were thereby secured.

O. G. LIBBY.

University of Wisconsin, June 24, 1902.

RACINE COUNTY.¹

ORGANIZATION.

The present county of Racine is a portion of the territory ceded to the United States by the treaty of 1833 with the Pottawatomie and other tribes of Indians. When the territory of Wisconsin was organized it was embraced within the boundaries of Milwaukee county, of which it remained a part until 1837. The legislature of 1836—the so-called “Belmont” legislature²—by an act approved Dec. 7, 1836, divided the original Milwaukee county and provided for a new county as follows: “Sec. 2. Townships No. 1, 2, 3 and 4 north, of ranges 19, 20, 21, 22 and 23 east, of said 4th principal meridian, shall be and the same are hereby constituted a separate county, and be called Racine, and the seat of justice of said county is hereby established at the town of Racine. The County of Racine shall be organized from and after the passage of this act, and the inhabitants thereof be entitled to all the rights and privileges to which by law the inhabitants of the other organized counties of this territory are entitled; and the said county shall continue to be a part of the Third Judicial District, and a District Court shall be held therein, at the said seat of justice, at the Court House or such other place as may be provided. Two terms of the said District Court shall be held annually after the organization of said county, on the first Monday in July and third Monday in November; and the several acts concerning the District Courts in

¹A thesis submitted to the faculty of the University of Wisconsin for the Baccalaureate degree by A. W. Blackburn, 1901.

²First legislature of Wisconsin territory held at Belmont, Iowa county.

the Territory of Wisconsin shall be and they are hereby made applicable to the District Court of the county of Racine; and the counties of Walworth and Rock shall be and are hereby attached to the county of Racine for judicial purposes."¹

Up to 1850 Racine county included the present county of Kenosha. By an act approved January 30, 1850, it was enacted that all of Racine county within the following boundaries should be erected into a separate county, called Kenosha. "Commencing at the S. W. corner and running thence east on the state line to center of Lake Michigan and S. E. corner of said county; thence northerly to line between townships 2 and 3; thence west-erly on said line to eastern line of present town of Burlington; thence southerly on said line to S. E. corner thereof; thence westerly on south line of said town to the east line of the county of Walworth; thence south on said line to place of beginning."²

GEOLOGY AND SOIL.

Racine county lies entirely within the belt of land along Lake Michigan, which is underlaid by the Niagara limestone formation and has the rich soils which such regions generally possess. Map I shows the distribution of the soils.³ In the extreme eastern part of the county, along the lake, is a narrow strip of sandy loam. The central and eastern part of the county has a large area of prairie loams. This needed little clearing, hence was eagerly seized by the first settlers. In the northeastern and northwestern parts of the county, covering about one-third of Caledonia, one-half of Norway, one-third of Waterford and a part of Rochester are found the clayey loams of the medium and heavier varieties. Along the Des Plaines river in the central part of the county, and in Norway township around Wind Lake, covering about one-third of the township of Norway, and in various other low and swampy places are found humus soils, mainly muck and peat. The balance of the county has a soil on which oaks flourish—clayey loams of the lighter varieties. The county was affected by glacial action and this is particularly apparent in

¹Act No. 23, Laws of 1836, Sec. 2.

²Session Laws of Wis., 1850; Ch. 29, Sec. 1.

³Taken from atlas accompanying Geological Survey Wis. Plate II B.

its western part, which has an arm of the Kettle range extending up into it from the south.

Racine county is a rolling prairie, and its vegetation is about evenly divided between the "Oak group" and "Prairie grasses," with scatterings of "grass and sedge" corresponding to the low places. There is also a "Maple" area in the northeastern part of the county. Three rivers—the Root, which flows southeast into Lake Michigan, the Des Plaines, which flows directly south through the central part of the county and which discharges into the Illinois, and the Fox, in the western part, the largest and most important and which also empties into the Illinois, furnish excellent drainage, and considerable water power for the county. The water shed between the St. Lawrence system and the Mississippi system in Racine county, is in the eastern part of the county and has an elevation of from 100 to 200 feet above the level of Lake Michigan. The topography of the county as a whole is that of a gentle rise from an elevation of a few feet above Lake Michigan in the extreme east to a height of 300 to 400 feet in the western part of the county.¹

EARLY SETTLEMENT.

The first visit ever made by white men to the region of Racine county, of which we have any record, is that of Vincennes and a party of Frenchmen who were on their way to the Miamis in 1699. A part of his band were missionaries under the conduct of Henri de Tonty; Vincennes continued his course but Tonty and the missionaries remained in the vicinity seeking the most accessible route to the Illinois river. They had been informed by Indians that by ascending the Root river and making a portage of nine leagues they would reach another river (Fox of Illinois), by which they could reach the Illinois.²

The first white settler of Racine county was a trader, a Frenchman, Jak Jambreau by name, who had his trading post at Skunk Grove, where there was an Indian settlement. He,

¹The material on Geology and Soil was taken from *Geology of Wisconsin*, Vol. II (1873-1877).

²Narration of these incidents in a letter of one of the missionaries is the first account of this region on record. (*Hist. Racine Co., West. Hist. Co., Chicago*), p. 286.

however, cannot be considered a pioneer because, following the example of so many of his countrymen, he married a squaw and became an Indian.

Very different were the men who came later to found enlightened institutions of society and government and who are worthy of the name of pioneers. In November, 1834, Capt. Gilbert Knapp,¹ a native of Massachusetts, accompanied by two men in his employ came from Chicago along the Indian trail to Skunk Grove. From here an Indian piloted him to the mouth of Root river, where Knapp decided to locate, and here built a cabin on the present site of Racine.

The founding of Racine was the initial step towards the settlement of Southeastern Wisconsin. Immigration began actively in 1835, and throughout 1836 increased and continued beyond expectation. Within a year from the time when Knapp made his claim, settlers found their way into nearly every township of the present county of Racine. Mt. Pleasant was settled in January, 1835; Caledonia, close of 1834 or beginning of 1835; Yorkville, summer, 1835; Raymond, by September, 1835; Rochester, fall of 1835; Burlington, December, 1835; Waterford and Dover, 1836; Norway, 1838, though it was not until early in 1840 that the first company of Norwegian immigrants arrived and located in the vicinity of Wind Lake, from the predominance of which nationality the township takes its name.

From this time on the growth of the county was very rapid. According to the census of 1842 there were 3,524 persons within the boundaries of the present county of Racine. In 1850 it had, by a marvelous development and increase, reached the comparatively large population of 14,968, while in 1860, 21,361 persons claimed the county as their home.

NATIVITY.

Taking as a basis the data given in the census enumerator's returns for the years 1850 and 1860, we shall now attempt to point out some of the most salient facts in regard to the nativity

¹First bona fide settler in territory now known as Racine, Kenosha, Walworth and Rock counties, Illst. Racine Co., p. 289.

of the people who settled and lived in Racine county in its earlier years;¹ their location in said county by townships and, where possible to assign, a reason for so locating; lastly, what changes took place during the period from 1850 to 1860, as evidenced by a comparison of the percentages of each nationality, in each township for the years 1850 and 1860.

To aid in this effort Table I has been prepared. For convenience the nativities have been grouped by sections and percentages used instead of totals. The table gives the percentage of native and foreign born in the county for the years 1850 and 1860; the percentage of each nativity group in the whole county; the percentage of every nativity group in every city or township.

If we glance at Table I we find as a capital fact that in 1850, 23.6% of the population of the county were natives of New York and that by far the larger part of these lived in the eastern townships of the county.² The city of Racine was 25.3% New York people; town of Racine, 23%; Caledonia, 22%; Raymond, 24%; Yorkville, 24%; Mt. Pleasant, 42%. The only western township having above the county average of New Yorkers is Rochester, which has 25%. The reasons for their locating thus may possibly be, that these townships possessed advantages, natural or accidental, which caused them to be especially attractive to the pioneer—for the New Yorkers and New Englanders were the pioneers of Racine county—and being among the first on the ground they were able to secure these advantages by reason of their priority of claim. Racine City was the natural gateway to the county. From here the new arrivals started out to look for lands.

¹U. S. Census 1850 and 1860. Copies of the original records in the office of the Secretary of State.

²See Map I for location of townships.

Table I. — NATIVITY OF POPULATION OF RACINE COUNTY BY PERCENTAGES.

Born in	Year.	TOWNSHIP.										
		Racine City.	Racine town.	Mt. Pleasant.	Caledonia.	Raymond.	Yorkville.	Norway.	Dover.	Waterford.	Rochester.	Burlington.
Wisconsin	1850	12.1	15.4	18.4	20.4	21.4	21.4	17.4	20.4	21.4	19.4	17.5
	1880	29.8	35.4	35.4	33.4	34.4	33.4	31.4	31.4	37.9	34.2	33.4
New York	1850	25.3	23.4	42.4	22.4	21.4	24.4	2.4	14.4	.....	23.4	17.4
	1880	14.3	18.4	9.4	14.4	17.4	2.4	9.4	19.4	16.4	8.8	13.2
New England States	1850	11.8	9.4	8.4	13.4	11.4	7.4	2.4	5.4	.....	18.4	6.4
	1880	7.8	6.4	5.4	5.4	5.9	5.4	3.2	9.8	12.2	6.4	10.5
Middle Atlantic (exc. of N. Y.)	1850	2.5	3.4	1.4	2.4	1.4	1.4	.....	2.4	.....	1.4	7.4
	1880	1.5	1.9	2.4	1.9	1.4	1.4	6.4	1.7	1.1	1.6	1.4
Southern	1850	.7	4.4	.....	9.4	3.4	.....	2.4	.....	.....	3.4	1.4
	1880	.6	5.4	3.4	3.4	1.3	2.4	1.2	1.6	2.7	3.7	2.4
North West	1850	6.4	3.4	3.4	3.4	1.4	4.4	3.4	2.4	.....	5.4	4.4
	1880	5.4	3.4	3.4	3.4	1.3	2.4	1.2	1.6	2.7	3.7	2.4
British America	1850	2.3	3.4	1.4	1.4	6.4	1.4	2.4	1.4	.....	2.4	1.4
	1880	1.7	3.4	1.4	1.4	3.3	2.4	1.3	1.3	1.4	1.1	1.4
British Isles	1850	21.3	17.4	19.4	13.4	21.4	31.4	9.4	16.4	.....	14.4	19.4
	1880	20.2	21.4	10.4	16.5	29.4	6.7	32.4	8.4	16.8	10.1	17.5
German States	1850	18.4	15.4	2.4	20.4	8.4	6.4	9.4	4.4	.....	5.4	29.4
	1880	13.4	0.4	19.4	8.1	5.6	9.7	6.4	14.4	8.4	33.4	14.4
Scandinavian Countries	1850	1.8	.8	.....	4.4	6.4	3.4	37.4	1.4	.....	6.4	4.9
	1880	1.7	1.2	1.1	10.6	5.4	40.4	1.8	3.4	.....	1.1	3.5
Rest of Europe	1850	.7	2.4	2.4	7.4	.....	4.4	2.4	.....	.....	2.4	4.4
	1880	2.9	2.4	16.4	2.7	1.4	4.2	1.8	1.6	6.8	2.7	4.1
Not Given	1850	.6	.8	5.4	.....	.....	.....	1.4	.....	.....	2.4	.....
	1880	1.2	.....	.....	.....	.....	.....	2.4	.....	5.4	.....	.....
Native Born Total	1850	30.4	58.8	75.2	63.3	61.7	59.2	21.2	45.6	.....	71.2	48.8
	1880	58.6	66.3	53.2	58.3	60.5	35.9	57.4	70.9	66.8	52.8	58.3
Foreign Born Total	1850	40.4	41.1	24.8	36.7	38.3	40.8	78.8	51.4	.....	23.8	51.2
	1880	41.4	33.7	46.8	41.7	39.5	61.1	43.4	29.1	33.2	47.2	41.4

Hence it is natural that the eastern part of the county should be settled and occupied by the first settlers. Then again the soils in the eastern and central part of the county were prairie loams, requiring little if any clearing, and thus more valuable in the eyes of a pioneer.¹ The reason why Rochester, an extreme western township, should show a predominance of New Yorkers is due, no doubt, to its favorable situation on the Fox river, its waterpower being the best in the county. In fact, it was the waterpower which attracted the first settlers to select the present

¹See Map I for soils.

sites of the villages of Rochester and Waterford, and the New Yorkers, together with the New Englanders, being the first on the ground, naturally took possession of this great advantage.¹

The group of the next highest percentage, 21%, for the whole county in 1850, is that of the natives of the British Isles. They arrived in the county somewhat later than the natives of the eastern states, and as a consequence had to take such lands as were left. They showed the clannish instinct to a marked degree and clung together. Thus we have existing even to this day sections which are known as the English, Irish, Scotch and Welsh settlements. By Table I we see that in 1850 Dover has 46% of British born inhabitants, while Yorkville, the next township to the east, is 31% British; Racine City, 21.3%, and Raymond, 21%. The reason they located in these places, in greatest numbers, seems to be because here was the best lands then unoccupied. Another reason why they seem to have massed in Dover and Yorkville townships is the fact, which I mentioned above, of their tendency to form groups. After the first settlers had located in a certain township the later comers of that nationality would make this a nucleus and thus form a settlement. Thus in Dover township we have an English and an Irish settlement. In Yorkville there is a Scotch settlement, while the largest number of British found in Racine are Welsh. This seems to be quite an influential factor in determining the choice of a new settler, especially one of foreign birth, as to the locality in which he shall reside.

The Germans were the next most important element. In 1850, they comprised 12.1% of the total population of the county. Of the townships, Burlington had the largest German element, or 29% of its entire population; Caledonia was 20% German; Racine township 15%, and Racine city 13%; the rest of the townships of the county all had a well marked German element. The Germans did not seem to mass in one locality so distinctly as did the other foreigners. Perhaps this was due, in a measure, to the decentralization of the mother country, the natives of the several German states calling themselves not Germans but by the name

¹ Hist. Racine and Kenosha Cos., p. 292.

of the state they came from. One sees this most forcibly if he will glance over a page of the original census returns for 1850.

The New England men, though they comprised only 10.5% of the entire population of the county in 1850, were among the first settlers of the county. Indeed, it was a Massachusetts man who made the first settlement. Rochester, we see, has the largest percentage of New England people of any of the townships or 18% of its total population. The greater part of these were Vermonters. Other townships having above the average number of New England people were: Raymond, with 11%; Caledonia 13%, and Racine city 11.8%.

In 1850 the only other foreign group which was at all numerous, and this is only one township, was the Scandinavians, who made up 4.9% of the total population of the county. The most of these were found in the township of Norway of which they were 57% of the total population. Rochester and Raymond had 6% Scandinavian. It may perhaps be mentioned here that Norway was first settled by the Norwegians in 1840 and soon became the center of Scandinavian emigration to this state, and the settlement itself is regarded as the first permanent Scandinavian colony in Wisconsin.¹ As to the rest of the groups none are of sufficient importance to merit special notice.

In 1850, 17.5% of the total population of the county were natives of Wisconsin and the only fact specially interesting about the distribution of these is that the percentage of those born in Wisconsin for Racine city and Racine township is less than the average for the county. Racine city is 13.1%, and Racine township 15%, while in the more western and less thickly populated townships those born in Wisconsin were above the county average, except Norway, which was the last township settled and which had only 17% born in Wisconsin. This may show one of two things, either that the families were larger in the western and agricultural townships or that the younger generation "struck out" for itself into the newer and less densely populated localities.

¹The first Scandinavian newspaper in the country, called "Nord Lyset," was established here, and a log church, built at the central point of the settlement by the colonists in 1845, was the first Norwegian Lutheran church built in the United States. Hist. Racine and Kenosha counties, p. 306. (Chicago, Western Hist. Co.)

Taking the county as a whole, the population in 1850 was 58.6% native born. Those townships which had a larger foreign population than native were Burlington, 51.2%; Dover, 54.4%, and Norway, 78.8%. These we have seen were peopled mainly by Germans, British and Scandinavians, respectively.

Such being the situation in 1850, let us now examine the condition of things as revealed by the census returns of 1860. Turning to our Table I we see that a great change has taken place generally, although the percentage of native and foreign born residents for the whole county remains practically the same as in 1850.

New York is no longer the predominating group, but this is not surprising, for we should expect to find, as we do here, that those born in Wisconsin are most numerous. New York, however, has decreased almost one-half—from 23.6% of total population in 1850 to 13.2% in 1860. Almost the same thing happens in the case of the New England population. It decreases from 10.5% to 6.3%. All the rest of the native born groups decrease in their percentage of the total population of the county, except, of course, the Wisconsin-born, while on the other hand the foreign born hold their own and even increase their percentage in some cases. The population of the whole county increased 42.7% in the ten years from 1850 to 1860. This fact must always be taken into consideration if we make any comparison between the percentages given in the table.

For the New York group, in 1860 those townships having above the county average of New York people are: City of Racine, 14.2%; Mt. Pleasant, 18%; Raymond, 14%; Yorkville, 17%; Rochester, 16%. These are the same townships having the largest percentage of New Yorkers in 1850. The decrease in the percentage of New York to the whole county is too great to be explained simply as a result of the falling off of immigration from that state. It means something more. It means that there are actually less people in the county who were born in New York than there were in 1850. Making due allowance for the deaths which may have occurred during ten years, we are forced to the conclusion that there was a shifting of population between 1850 and 1860. That some of the people who were in the

county in 1850 had moved on with the westward movement. Some, undoubtedly, had gone to California; others to more recently opened territory.

The same holds good for the New England population. In 1860 there are some 200 less New Englanders in the county than in 1850. The percentage for the whole county was only 6.3% in 1860. Of the townships Rochester was 12.2% New England; Waterford, 9.8%; Racine city, 3.9%; all the rest had below the average percentage for the county, although in 1850 Raymond and Caledonia were above the average, thus showing an even more marked decline.

The Middle Atlantic, Southern and Northwestern states also show a decline from their percentages in 1850. We see, then, that there was a very marked diminution in the native born elements, exclusive of those born in the county or state itself.

On the other hand, to compensate for this loss in the native born population, we find that the foreign born made a gain of .3% for the whole county, and their loss in percentage by groups is not nearly so great as in the case of the native born groups.

British America did actually lose some of its members by emigration from the county. The percentage for the whole county in 1850 for British America was 2.3%; in 1860, 1.4%. Of the townships Raymond shows the greatest loss, or a decrease from 6% in 1850 to 3.3% in 1860.

The British Isles group for 1860 shows a decrease in percentage for the whole county from 21% in 1850 to 17.5%. This is not a loss at all in the actual number of people of British nativity in the county, for it must be remembered that there is the 42% gain in population for the county to be overcome. It only means that the immigration from the British Isles was not large enough to overcome the increase in population for the county. The townships having the largest percentage of British born peoples are practically the same as in 1850. Racine city has 20%; Yorkville, 29%; Dover, 32%; Mt. Pleasant, which only had 19% British in 1850, in 1860 had 21% British. Those showing largest decrease are Raymond from 21% to 16.5%; Burlington, 19% to 10.1%. The decrease in the last two townships can be ascribed to a shifting of population.

The German group shows the only increase of any importance outside the Wisconsin born. Here there is an increase from 12.1% to 14.4% during the period from 1850 to 1860. This serves to fix the nationality of the majority of people coming into the county between 1850 and 1860 as Germans. These Germans located as a rule where they found the most of their fellow countrymen. Thus Burlington, which in 1850 was 29% German, in 1860 had 33.4% of that nationality; Racine city 13% in 1850, had 13.4% in 1860; Caledonia remains about the same, having 20% German in 1850, 19% in 1860. All the townships increased their percentage of German born population very noticeably.

The Scandinavians fell off from 4.9% of the total population in 1850 to 3.5% in 1860. The most marked decrease is in the township of Norway, which fell off from 57% in 1850 to 40% in 1860. The greatest increase in Raymond, which lies just to the east of Norway, from 6% in 1850 to 10.6% in 1860. The other township which increased noticeably was Yorkville, which in 1850 was only 3% Scandinavian, in 1860 was 6%.

Peoples from the "Rest of Europe" increased from .5% of the total population of the county in 1850 to 4.1% in 1860. The greatest increase was in Caledonia township, which, from a percentage of .7% in 1850 jumped to 16% in 1860. Rochester also increased from .2% to 6.3%. The abrupt rise in both these townships was caused by an influx of Bohemians during the period 1850-1860.¹

The only other group to be taken account of is the natives of Wisconsin. This shows the largest increase of any group. In 1850 it was 17.5% of the total population, while in 1860 it is 33.4%. The same peculiarity in the distribution of those born in Wisconsin among the townships is shown for 1860, as in 1850. The city of Racine has a lower percentage of Wisconsin born people than the county average, it having only 29.8%, and the same reason may be assigned for it as in 1850.

To sum up for the county: In 1850 we find that there are three important elements in the county—

1. The New York, 23.6%, and New England, 10.5% Population.

¹Copies of the original Census Records, office of Secretary of State.

2. The natives of the British Isles, 21%.

3. The natives of the German States, 12.1%.

These, in their location, show that they came in three distinct waves of immigration: 1st. Those from New York and New England, who settled most generally in the eastern townships of the county and in whatever place there were the greater natural advantages. 2d. The natives of the British Isles, who chose the best lands which were left and who tended to make settlements in groups according to their nationality. 3d. The Germans, who came last and who did not attain their maximum strength until 1860. They filled up the gaps and were more evenly distributed over the whole county. The Scandinavians, who came contemporaneously with the British, settled in the township of Norway and became the center of early Scandinavian immigration to the state.

By 1860 the relative importance of the nativities had changed. The people from the British Isles were the most important element. Next came the Germans, who had increased their percentage since 1850. The New York element was now third in numerical importance; though combined with New England, it gave a Yankee predominance. Those born in Wisconsin have been left out in this final consideration.

The most striking fact from 1850 to 1860 is that foreign immigration was able to increase the percentage of foreign born in the county .3%.

DENSITY OF POPULATION AND WEALTH PER CAPITA

Having examined the nativity of the people of the county for the years 1850 and 1860, let us now investigate the economic conditions for those same years, showing, if possible, the influence nationality had upon the density of population and wealth per capita:

Table II—POPULATION PER SQUARE MILE.

	1850	1860	1870	1880	1890
Mt. Pleasant	30.	35.7	69.9	42.5	43.
Town of Racine	27.				
Caledonia	30.2	48.7	56.	53.	54.6
Raymond	28.3	35.3	44.6	46.3	49.5
Yorkville (with village of Union Grove)	27.6	35.6	44.	42.5	38.6
Yorkville (without Union Grove)				31.1	
Norway	20.8	26.9	28.8	27.2	23.3
Dover	23.3	30.7	29.	25.7	25.6
Waterford (with village)		40.2	43.8	40.3	43.
Waterford (without village)		28.6	28.7		
Rochester (with village)	34.8	51.8	48.6	43.	38.8
Rochester (without village)		34.8	26.8	27.2	
Burlington (with village)	33.9	53.8	65.7	65.1	74.7
Burlington (without village)		30.2	27.9	26.8	26.1
Racine Co. (with city of Racine)	43.9	62.6	78.4	90.7	106.4
Racine Co. (without Racine)	28.9	39.7	49.4	43.6	44.7

Table II shows the population per square mile for the years 1850, 1860, 1870, 1880 and 1890 of each township, with and without villages, and of the entire county, with and without the city of Racine, for those same years.

The township of Raymond is the only one in the county which shows a steady increase in population during the entire period from 1850 to 1890. Mt. Pleasant, Caledonia and Waterford show a fluctuating population. They increased very rapidly until they reached their maximum density in 1870. The census of 1880 showed a great loss, from which they are again recovering in 1890. They are colored green on Map II, and their rate of increase and density of population is shown in Table II. Yorkville, Norway and Dover likewise increased until 1870, from which time they have steadily declined. Rochester reached its maximum density in 1860, since when it has continued to decline. Burlington, including the village, shows an almost continuous increase, although from 1870 to 1880 there was a slight decrease. However, the township itself, exclusive of the village, shows a constant falling off in density of population and must be considered a declining area. The county as a whole, including Racine city, has shown a large increase. Exclusive of the city, it increased until 1870, when there was a falling off shown in 1880, and from that time on it has gained very slowly.

The table as a whole seems to show that the county, leaving out the city of Racine, had its greatest density of population in

the year 1870. From 1870 to 1880 there was a great decrease, a result, perhaps, of the leaving of the younger generation for the great West. In 1890 most of the townships which are declining, and which have the smallest population per square mile are those which were occupied largely by foreigners, in 1860, and whose per capita valuations for that same year were below the average for the county. Rochester is the exception.¹

Let us now examine into the wealth of Racine county for the years 1850 and 1860. Table III shows the per capita valuation of the city of Racine of the three eastern towns in a group, of each of the four middle townships, and of the three western townships in a group, for those two years. It also shows the per capita valuation of the entire county, both with and without the city of Racine for the years 1850 and 1860, respectively.

Table III—PER CAPITA VALUATION.

TOWNSHIP.	1850	1860
Racine city	\$202 33	\$606 86
Racine town	317 51	516 74
Mt. Pleasant		
Caledonia		
Raymond	246 97	360 29
Yorkville	257 29	399 23
Norway	111 47	256 36
Dover	182 96	426 89
Waterford	171 68	438 48
Rochester		
Burlington		
County (with city Racine)	219 32	499 77
County (without Racine)	228 12	437 90

TABLE IV.

	1850	1860
Group I ²	\$225 91	\$534 30
Group II ³	163 32	374 50

In 1850 the valuations given are only for real property, while in 1860 it includes both real and personal. By our Table III.

¹See Table I and Table III; also Map II.

²Includes Racine city, Mt. Pleasant, Caledonia, Raymond, Yorkville and Rochester in 1850; in 1860 included Mt. Pleasant, Yorkville, Waterford and Rochester.

³In 1850 included Norway, Dover and Burlington; in 1860 included Caledonia, Norway, Dover and Burlington.

we see that the city of Racine in 1850 had a per capita valuation of only \$202, or less than the per capita for the whole county, which was \$219. The group of eastern townships—Racine, Mt. Pleasant and Caledonia, had a valuation of \$317. Of the middle townships, Yorkville has a valuation of \$317. Of the middle townships, Yorkville has a valuation per capita of \$257, Raymond \$246, Norway \$111, Dover \$182. The group of western townships, Waterford, Rochester and Burlington, had a valuation of \$171, which is below the valuation per capita of the whole county, both including Racine city and excluding it.

The difference in per capita valuations of the several sections of the county is most probably due to the difference in value of the land in those regions. In 1850 it could not have been a result of the difference in density of population in those regions, for by Table II we see that there is about the same density of population for the eastern group of townships as for the western, and yet the former has a per capita valuation of \$317 and the latter only \$171.

In 1860 we have the valuation for both real and personal property and thus can obtain a much fairer estimate of the wealth per capita of the inhabitants of the county for that year. By table III we see Racine city has just tripled its per capita valuation and now has \$606 for each inhabitant. The group of eastern townships shows a consistent rise, in advancing from \$317 to \$516 per capita. The four central townships do not show the rise one might expect from their valuation in 1850. Raymond advances from \$246 to \$360; Yorkville from \$257 to \$399; Norway, \$111 to \$256; Dover, \$182 to \$426. These are valuations below the average per capita for the county in 1860, both inclusive and exclusive of Racine city. The western group of townships, on the contrary, increase their per capita wealth more than one would expect from the figure for 1850. They rise from \$171 to \$438 per capita, or from below the county average in 1850 to an equality with it in 1860. What is the reason for the increase in wealth in some parts of the county to a greater extent than in others?

In these central townships where there was the least gain in wealth there was the largest per cent. of foreign born people in

1860.¹ We see from Table I that Dover was 43% foreign, Nor-61.1% and Raymond 41.7%. These three townships combined had a per capita of \$187 in 1850, and in 1860 only \$352, which was a very small comparative gain. If we can demonstrate that those townships which have the smallest native born population have also the least wealth per capita, can we not conclude that the small rise in wealth in the central townships was due to the fact of its large foreign population?

Table IV has been prepared showing the average wealth per capita of those towns having the largest native born population and likewise the average of those townships having smallest native population. Group I includes all townships having above the county average per cent. of native born; Group II townships having below the county average of native born population.² From Table IV we see that Group I has a per capita wealth of \$225 in 1850, increasing in 1860 to \$534; Group II has a per capita of \$163 in 1850, while in 1860 it has only \$374. The former having much the larger per capita in 1850, increases its per capita by \$309 in 10 years, while the latter, having a much smaller per capita to start with, and thus a greater opportunity for gain, only increases its per capita by \$211 during the same period. This seems to show that a township which has a large foreign population increases in wealth more slowly than one made up largely of native born. Hence we may conclude that the reason why the central townships showed such a small gain in per capita wealth from 1850 to 1860 was because of their large foreign population.

OCCUPATION.

In studying the population of a county, some attention should be given to the occupation of its inhabitants. With this end in view Table V has been prepared, showing the occupation of all males above 15 years of age, who were inhabitants of the county for the years 1850 and 1860. For convenience the occupations have been grouped, according to their nature, into several general heads and percentages have been used instead of totals.

¹See Map II for the central townships of the county.

²See Table I.

Table V.—OCCUPATION.

Occupation.	Year.	TOWNSHIP.											
		Racine city.	Racine town.	Caledonia.	Mt. Pleasant.	Raymond.	Yorkville.	Norway.	Dover.	Waterford.	Rochester.	Burlington.	Total for Co.
Farmer	1850	6.6	42.5	86.5	88.9	78.9	79.1	95.1	82.9	.....	46.7	35.5	46.7
	1860	2.4	.....	46.5	42.	62.	63.7	58.8	74.7	35.1	32.7	32.6	30.3
Laborer.....	1850	15.6	26.8	.....	.....	.....	3.7	.....	8.9	.....	15.1	13.3	10.4
	1860	18.	.....	44.9	47.7	24.	17.6	25.1	20.3	32.6	31.2	29.2	27.8
Artisans and Me- chanics	1850	33.3	10.4	7.8	5.8	11.8	4.	2.2	5.2	.....	16.9	13.4	18.6
	1860	29.1	.....	3.4	3.9	6.7	6.	5.7	1.1	12.3	15.	13.9	15.6
Smaller trades and professions	1850	15.1	6.7	.....	.....	.6	2.6	4	.4	.....	4.7	3.8	7.1
	1860	15.8	.....	.9	1.	1.4	1.6	2.	.3	4.8	5.2	6.6	7.6
Merchants and capitalists.....	1850	6.7	1.4	.9	.8	.....	2	.....	.4	.....	2.5	3.2	3.5
	1860	4.9	.....	.1	.....	.5	2.2	1.2	.....	.9	3.3	2.6	2.5
Professional.....	1850	3.8	2.2	1.2	.8	2.7	2.	.4	.4	.....	1.7	3.4	2.5
	1860	3.6	.....	.1	.9	1.9	1.3	.8	1.1	2.9	2.6	3.4	2.3
Petty trade-men...	1850	6.2	2.2	.6	.2	1.	.....	.....	.....	.....	2.5	2.3	3.1
	1860	5.9	.....	.6	.5	.....	.5	1.2	.....	2.5	.7	2.9	2.9
Teamsters	1850	2.4	.....	.....	.....	3	.....	.....	.....	.....	.9	.....	1.4
	1860	2.5	.....	.2	.....	.....	.....	.....	.....	.4	.....	1.4	1.1
Officials.....	1850	.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.4
	1860	.9	.....	.....	.3	.....	2	.....	.3	.....	.3	.1	.4
Sailors.....	1850	4.6	.....	.....	.2	.6	.....	.....	.....	.....	.....	.6	1.9
	1860	4.3	.....	.8	.....	.2	1.1	2.4	.....	.....	.....	.1	1.9
None and not given	1850	3.6	6.7	2.5	1.4	3.7	6.3	1.7	1.2	.....	8.1	3.	3.8
	1860	9.1	.....	2.	2.8	2.8	3.	2.4	1.8	4.1	4.5	4.4	5.3
Miscellaneous.	1850	1	.7	.3	1.9	.....	.....	.....	.4	.....	.1	1.	.7
	1860	3.3	.....	.....	.5	.....	.2	.....	.....	4.6	4.1	3.2	2.1

The most striking fact, perhaps, in the whole table is the decrease in the percentage of farmers from 1850 to 1860, and the corresponding increase in the "laborer" class during the same period. This was undoubtedly due to the increase of population, especially foreign, and the rise in value of land, thus compelling many to hire out their services, whereas in 1850 they were able to secure land for themselves and be their own masters.¹

ERRORS IN U. S. CENSUS.

In going over the census returns for 1850 and 1860 as they appear in the original records, one is struck with the many inaccuracies which occur and which are more often attributable to

¹See Table IV.

the carelessness or negligence of the enumerators than to any other reason. For example, some pages of the census returns have the wrong sex placed opposite the names. Sometimes the entire page would be wrong in this respect, showing that it had been copied and that the copyist had started wrong and thus made the same mistake throughout that entire page. Another common error was to put down the occupation of persons under 15 years of age, or to leave out those over 15 years of age, the former being uncalled for, the latter required. Sometimes the nativity of an entire page of names would be omitted. Then again there would be four or five names crowded on two or three lines, and when the nativity for those extra names was left out the number of persons on the page might easily be counted wrong, the extra names being overlooked.

The material used in this thesis for the nativity, density, wealth and occupation of the population of Racine county for the years 1850 and 1860 is taken from the original records in the office of the Secretary of State, and it is believed the compilation is so careful and accurate as to warrant us in pointing out some errors made in the official compilation. Table VI shows the correct population of the several townships for the years 1850 and 1860, and the difference between this and the population as given in the U. S. census reports.

Table VI—ERRORS IN U. S. CENSUS FOR RACINE COUNTY IN 1850, 1860.

	Correct Population.		Inaccuracies in U. S. Census.		Inaccuracies in Wis. Blue Books.	
	1850	1860	1850	1860	1850	1860
Racine city	5,108	7,822	— 1	—	.....	+ 9
Racine town	778	.....	+ 2	.....	.....	.....
Mt. Pleasant	1,081	1,819	+ 5	— 1	.....	— 1
Caledonia	1,090	2,438	—	.....	.....	.....
Raymond	1,021	1,374	—	.....	.....	.....
Yorkville	997	1,283	+ 1	.....	.....	+ 2
Norway	751	971	—	.....	.....	.....
Dover	839	1,108	—	.....	.....	+ 2
Rochester	1,674	393	— 2	.....	.....	.....
Burlington	1,629	2,263	—	.....	.....	— 39
Waterford .....	.....	1,450	.....	.....	.....	+ 6
Total	14,968	21,261	11	1	.....	59

The amount of variation is indicated for each town; the plus sign stands before the number when it is larger than the correct population, and the minus sign when it is smaller. When the population is correct, a dash occurs. The difference between the correct population and that given in the Wisconsin Blue Books (years 1864 and 1865) is likewise indicated for the census of 1860. From this table we see that there was a total of eleven errors in the United States census for 1850 and one error in 1860. The Blue Books (years 1864 and 1865) show a total number of errors of fifty-nine.

APPENDIX.

1850.

	Racine City.	Town of Racine.	Mt. Pleasant.	Caledonia.	Raymond.	Yorkville.	Norway.	Rochester.	Burlington.	Dover.	Total for County.
New England States	606	71	91	151	120	76	2	306	112	48	1,580
Maine	46	3	12	1	1	8	9	1	1	1	79
New Hampshire	34	3	7	11	4	30	8	1	1	1	118
Vermont	211	39	21	47	24	10	1	199	53	10	615
Massachusetts	179	11	32	42	59	46	36	10	25	46	461
Connecticut	106	21	51	43	29	16	1	33	12	7	294
Rhode Island	8	1	1	1	1	1	1	1	1	5	14
Middle Atlantic States	1,425	248	476	373	273	256	21	441	299	144	3,816
New York	1,294	183	462	248	255	244	21	424	286	121	3,628
New Jersey	47	8	4	10	12	5	4	1	18	109	109
Pennsylvania	77	16	9	11	6	7	12	12	5	15	15
Delaware	1	1	1	1	1	1	1	1	1	2	2
Maryland	7	1	1	4	1	1	1	1	1	12	12
Southern States	38	35	1	10	4	2	4	1	1	95	95
Virginia	12	3	5	1	1	2	1	1	1	23	23
North Carolina	10	2	1	1	1	1	1	1	1	14	14
South Carolina	2	1	1	1	1	1	1	1	1	2	2
Georgia	11	30	1	2	1	1	1	1	1	23	23
Kentucky	11	1	3	1	1	1	1	1	1	15	15
Louisiana	1	1	1	1	1	1	1	1	1	3	3
Tennessee	1	1	1	1	1	1	1	1	1	3	3
Missouri	2	1	1	1	1	1	1	1	1	2	2
Northwestern States	1,001	144	245	276	233	259	175	442	384	191	3,390
Wisconsin	674	117	205	220	214	215	132	357	313	174	2,621
Michigan	79	4	3	2	1	1	9	14	3	118	118
Illinois	68	8	9	4	4	4	4	19	4	120	120
Indiana	22	1	1	5	1	3	12	5	1	51	51
Ohio	155	12	26	18	15	35	69	32	9	372	372
Iowa and Nebraska	3	2	2	1	1	1	1	1	1	8	8

FOREIGN BORN.

British America	118	27	16	11	63	19	19	35	24	14	346
British Isles	1,089	137	216	150	223	113	69	27	124	591	3,149
England	295	80	79	59	123	33	8	151	222	212	1,412
Scotland	61	20	6	14	17	25	17	11	21	54	245
Wales	285	35	91	9	6	7	1	1	1	1	434
Ireland	292	47	25	68	76	48	44	74	81	121	976
Islands around Britain	56	5	15	1	1	1	1	1	1	4	81
German States	666	12	26	225	40	67	69	88	476	35	1,815
Scandinavian Countries	96	7	1	5	64	3	431	112	1	16	706
Rest of Europe	38	19	3	8	1	4	2	5	8	1	88
Not Given	34	7	6	1	1	1	1	4	1	1	53

1860.

	Racine City.	Caledonia.	Mt. Pleasant.	Yorkville.	Raymond.	Norway.	Dover.	Rochester.	Waterford.	Burlington.	Total for County.
New England States	572	135	123	74	76	4	36	114	143	57	1,364
Maine	34	4	10	...	3	...	...	6	1	4	62
New Hampshire	64	31	11	5	3	1	2	18	6	18	159
Vermont	151	40	49	11	20	1	5	55	97	31	460
Massachusetts	170	36	35	44	29	1	23	21	24	22	405
Connecticut	142	24	17	14	20	1	5	14	14	10	261
Rhode Island	11	...	1	...	1	...	1	...	1	2	17
Middle Atlantic States	1,235	278	349	241	208	27	127	153	293	237	3,143
New York	1,114	221	302	224	183	21	108	150	277	200	2,830
New Jersey	46	12	5	6	11	6	14	...	2	12	115
Pennsylvania	59	37	11	11	14	...	4	3	13	21	173
Delaware	1	...	1	...	...	...	...	...	...	...	2
Maryland	15	7	...	...	...	...	1	...	1	4	23
Southern States	58	10	11	6	...	2	1	1	1	3	93
Virginia	17	1	1	3	...	2	1	...	1	1	27
North Carolina	1	...	...	...	...	...	...	...	...	...	1
South Carolina	2	2	...	...	...	...	...	1	...	...	5
Georgia	5	...	...	...	...	...	...	...	...	...	5
Kentucky	9	1	7	1	...	...	...	...	...	1	19
Louisiana	4	...	...	...	...	...	...	...	...	1	5
Tennessee	8	5	1	...	...	...	...	...	...	...	14
Missouri	12	1	2	2	...	...	...	...	...	...	17
Northwestern States	2,717	876	724	456	462	345	468	365	590	865	7,858
Wisconsin	2,336	810	658	425	443	333	451	320	550	810	7,136
Michigan	69	8	8	...	...	3	1	5	9	8	111
Illinois	120	11	14	8	8	4	5	11	4	19	204
Indiana	20	18	10	...	1	1	1	5	3	1	69
Ohio	168	29	31	21	4	4	10	14	24	26	321
States West of Mississippi	4	...	3	2	6	...	...	...	...	1	16

FOREIGN BORN.

British America	138	13	15	26	43	2	15	11	21	18	302
British Isles	1,581	263	394	379	211	66	355	157	123	229	3,758
England	408	70	164	268	110	29	171	118	68	125	1,525
Scotland	130	12	25	30	12	12	38	5	10	9	263
Wales	352	35	111	27	17	...	1	8	...	15	566
Ireland	696	146	94	54	70	32	140	26	47	80	1,295
Islands around Britain	85	...	...	...	2	...	2	...	...	...	89
German States	1,063	468	184	77	104	95	67	75	204	756	3,079
Scandinavian Countries	140	4	15	8	126	389	15	3	50	3	763
Rest of Europe	228	389	4	19	35	41	21	19	24	6	883
Not Given	99	2	...	1	1	...	2	...	1	1	113

CRAWFORD AND RICHLAND COUNTIES.¹GEOLOGY, SOILS AND TOPOGRAPHY.²

The surface features of Crawford and Richland counties are high rolling ridges of land which are intersected in all directions by deep ravines. These ridges are high; in the town of Ithaca the summits of the ridges attain an average elevation of 500 feet above Lake Michigan, and in Crawford county there are places where the elevation of the ridges is between 300 to 500 feet above the valleys.

The counties are well watered by numerous small streams. Crawford county is the river county of the state, it has the Mississippi and Wisconsin as its boundaries and its interior drained by the Kickapoo.

An editorial in the Richland County Observer of November 27th, 1855, says: "There is sufficient water-power to be found in the streams (of Richland county) to propel a vast amount of machinery. The streams are rapid, and hence, great inducement is extended to the capitalist and machinist."

The prevailing geological formations of these counties are the Potsdam sandstone and the Lower Magnesian limestone, the latter generally overlying the former.

When once the streams had cut through the hard, resisting limestone they easily eroded the sandstone to a great depth.

The Potsdam sandstone is found in the river valleys, and the Lower Magnesian limestone is found as a surface work on a greater part of the ridges and in most of the valleys about the heads of the small streams and ravines. The Lower Magnesian is an important formation, not only on account of the large territory which it covers, which is about equal to that of the Potsdam, but because by its decomposition it produces a rich and fertile soil on the ridges which becomes washed down into the val-

¹A thesis submitted to the faculty of the University of Wisconsin for the Baccalaureate degree by J. W. Johnson, 1901.

²This discussion is based upon Chamberlain's Geology of Wisconsin and the material is drawn from his four volumes (1873-1877).

leys, thereby fertilizing the otherwise barren sand which has been derived from the Potsdam.

The soil of this region is fertile. In general, it is a clay soil mixed with vegetable mould and is more or less sandy in the valleys.

The land upon the hill-sides is generally too steep for cultivation, but as the whole country was originally covered with timber, there is a very little waste land. The timber consists of elm, maple, white, black, and burr oak, basswood, pine and butternut.

This section of the state, owing to its contour, soils and streams, has for its principal industries farming, stock-raising, butter and cheese-making, lumbering (principally in the fine, hard woods), milling and manufacturing of various kinds.

The ridges and streams afford protection and water for stock, and the soil is especially well adapted to the growing of tame grasses.

Winter wheat grows well on the ridges, and corn, potatoes, et cetera, thrive in the sandy loam of the valleys. Fruit trees do well, particularly the peach.

The economic value of the geological formations of this region is not great. There are some iron, copper, lead, good building-stone, lime and mineral water.

A very good building-stone is obtained from the dolomitic layers of the Potsdam; it is quite hard, dresses easily, and when finished makes a handsome building and withstands the action of the weather.

PEOPLING OF THE COUNTIES.

Crawford county, in 1850, had a population of 2,499. Of this number 76.29% were native born Americans. At this time Richland county had a population of 903, nearly all of whom were native born. The foreign element was only 6% of the whole.

In 1860 the population of Crawford county was 8,069, and there was a percentage of 72.6% native born.

The census of 1860 shows Richland county to have had a

population of 9,733. The percentage of foreign born at this time was 10.4%.

In both 1850 and 1860 each county had a large percentage of native born.

The larger foreign population is in the western half of the county. The town of Lynxville is a notable exception. This town and the town of Scott have the smallest percentage of foreign born population in the county, 11.44 and 12.37%, respectively.

The towns of Prairie du Chien, Wauzeka, Eastman, Seneca, and Freeman are those which have a percentage of native born below that of the county. The following table shows the leading foreign nationalities in these towns:

TOWNS.	NATIONALITY.	PER CENT.
Eastman	Irish	12.39
Freeman	Norwegian	24.10
Prairie du Chien	Irish	10.54
Seneca	English	12.77
Wauzeka	German	17.28

In Richland county the smallest percentages of foreign born population are found in the towns of Bloom, Sylvan, Forest, Richland, Eagle, Buena Vista, Rockbridge, and Willow; in the towns of Richmond, Richwood, and Dayton the percentages of native born are about the same as that of the county, and in the towns of Akan, Westford, Ithaca, Henrietta, and Marshall the percentages of native born are below that of the county.

In Westford 15.64% of the population are Prussians; in Akan 11.72% are from England, Ireland, Scotland and Wales; in Henrietta 11.83% are Irish, and in Marshall 13.24% are from the British Isles.

28.85% of the population of Crawford county in 1850 were born in Wisconsin.

In Richland county those who were born in the state constitute 16.72%.

In 1860, 30.3% of the people in Crawford county were born in Wisconsin, and in Richland county, 27.82%.

In both Crawford and Richland counties there were more people born in the state of New York than in any other state or

country, excepting the state of Wisconsin. This is true for 1860, as well as for 1850.

In Crawford county in 1850 those born in New York reached 15%, only 2% less than the percentage of those born in Wisconsin.

Those born in New York and living in Crawford county in 1860 constituted 10.94% of the county's population. No town in the county has a much larger or much smaller percentage, although the percentages for the town of Freeman and Marietta are somewhat smaller.

There is more variation in the town percentages of the New York population in Richland county in 1860. The entire county average is 12.45%.

The large percentages of the county populations native to the north-western states, including Wisconsin, are noticeable:

County.	Year.	Percentage.
Crawford	1850	49.73
Richland	1850	49.83
Crawford	1860	47.20
Richland	1860	59.00

All of the tables on nativity are to be found in the appendix.

A CORRECTION OF THE UNITED STATES AND THE STATE CENSUS.

The population which was obtained from the original records is placed in the first column of the following tables. From the original records the assistant marshal sends the totals from each town; these are found in the seventh census of the United States population. Column two shows the variations from the printed turns of the United States census, and column three shows the variations from the returns as given in the Wisconsin blue book.

The star indicates that the returns exceed the correct number; the minus sign that they are less than the correct sum, and a blank indicates that there was no variation.

County.	Year.	(1)	(2)	(3)
Crawford.....	1850 ¹	2,497		-1
Richland.....		903 ²		*60
Crawford.....	1860	2,069	-1	-1
Richland.....		9,733	-1	-1

POPULATION—1860.

Crawford County.

Towns.	(1)	(2)	(3)
Canton.....	873	-1	
Eastman.....	758		
Freeman.....	774		
Haney.....	462		*1
Lynxville.....	262		
Prairie du Chien.....	2,348		*1
Mariotta.....	681		
Scott.....	321		
Seneca.....	229		
Utica.....	625		
Wauzeka.....	677		

Richland County.

Towns.	(1)	(2)	(3)
Akan.....	241		
Bloom.....	527	-1	*1
Buena Vista.....	963		*1
Dayton.....	494		
Eagle.....	719		
Forest.....	565		
Henrietta.....	432	-1	
Ithaca.....	951	*1	*1
Marshall.....	529		
Richland.....	1,075		
Richmond.....	597		
Richmond.....	797		*1
Rockbridge.....	546		
Sylvan.....	761		
Westford.....	409		
Willow.....	448		

¹The marshals failed to hand in the statistics for Crawford and Richland counties in 1850.

²John W. Hunt of this city (Madison) compiled a table from the official returns, which were published in the Richland County Observer of November 27, 1855, and found the aggregate population of Richland county in 1850 to be 903. The error in the Wisconsin Blue Book seems to be a typographical one.

APPENDIX.*

Table I—NATIVITY OF POPULATION OF CRAWFORD COUNTY—1850.

States.	Number.	Percentage.
New England States:		
Connecticut	15	.60
Maine	16	.64
Massachusetts	26	1.04
New Hampshire	9	.34
Rhode Island	4	.15
Vermont	51	2.04
Total	121	4.81
Middle States:		
Delaware	1	.04
Maryland	6	.24
New Jersey	15	.60
New York	255	10.20
Pennsylvania	96	3.84
Total	373	14.92
Southern States:		
Alabama	4	.15
Georgia	3	.12
Kentucky	63	2.52
Louisiana	1	.04
Mississippi	1	.04
North Carolina	5	.20
Tennessee	9	.34
Virginia	38	1.52
Total	124	4.93
Southwestern States:		
Arkansas	4	.15
Missouri	41	1.64
Texas	1	.04
Total	46	1.83
Northwestern States:		
Illinois	189	7.56
Indiana	93	3.72
Iowa	27	1.07
Michigan	22	.88
Minnesota	5	.20
Ohio	176	7.04
Wisconsin	721	28.85
Total	1,243	49.72
British America:		
Canada	144	5.76
Hudson's Bay	7	.28
Red River of the North	10	.40
Total	161	6.44

*The material incorporated in the tables in the appendix was taken from copies of the original records in the United States Census Reports.

Table I.—Continued.

States.	Number.	Percentage.
British Isles:		
England	8	.32
Ireland	77	3.08
Scotland	17	.68
Wales	2	.08
Total	104	4.16
German States:		
Bavaria	1	.04
Germany	126	5.04
Hanover	1	.04
Prussia	1	.04
Total	129	5.16
Continental Europe (Excluding German States):		
Belgium	1	.04
France	26	1.04
Holland	1	.04
Norway	164	6.56
Poland	3	.12
Switzerland	18	.72
Total	213	8.52

Nativity not given 2

Unknown 1

Table II—NATIVITY OF POPULATION OF RICHLAND COUNTY—1850.

States.	Number.	Percentage.
New England States:		
Connecticut	13	1.43
Maine	6	.66
Massachusetts	11	1.21
New Hampshire	6	.66
Rhode Island	2	.22
Vermont	20	2.20
Total	58	6.38
Middle States:		
Delaware	2	.22
Maryland	10	1.10
New Jersey	4	.44
New York	136	14.96
Pennsylvania	31	3.41
Total	183	20.13
Southern States:		
Alabama	1	.11
Kentucky	45	4.95
North Carolina	11	1.21
South Carolina	2	.22
Tennessee	14	1.54
Virginia	50	5.50
Total	123	13.53
Southwestern States:		
Arkansas	1	.11
Missouri	17	1.87
Total	18	1.98
Northwestern States:*		
Illinois	84	9.24
Indiana	103	11.33
Iowa	5	.55
Michigan	10	1.10
Ohio	97	10.67
Total	299	32.89
Wisconsin	150	16.61
Nativity not known	15	1.65
British America:		
Canada	1	.11
Lower Canada	1	.11
Nova Scotia	1	.11
Upper Canada	3	.33
Total	6	.66
Europe:		
England	18	1.98
Germany	18	1.98
Ireland	4	.44
Norway	9	.99
Switzerland	1	.11
Total	50	5.50

*Excluding Wisconsin.

Note.—Enumeration included 15 of unknown nativity.

Table III—COMPARISON OF PERCENTAGES OF NATIVITY OF THE POPULATION OF CRAWFORD COUNTY, AS SHOWN BY THE UNITED STATES CENSUS OF 1860.

County and Towns.	Wisconsin.	North Western States — Wisconsin	Total North Western States.	New York.	Middle States — New York.	Total Middle States.
Crawford county..	20.3	16.9	46.9	10.9	6.5	17.6
Clayton	24.7	17.8	42.5	12.3	6.5	18.9
Eastman	10.1	10.2	40.3	13.6	5.3	19.0
Freeman	20.5	16.8	37.3	6.4	7.4	13.8
Haney	27.0	21.3	58.3	11.0	8.0	19.0
Lynxville	27.8	21.6	59.4	14.8	9.1	23.9
Marietta	32.6	23.9	56.5	7.2	11.6	18.8
Prairie du Chien..	34.3	8.7	43.0	12.0	4.0	16.0
Scott	27.4	27.7	55.1	9.0	12.0	21.0
Seneca	24.7	17.8	42.5	12.3	6.5	18.8
Utica	32.3	19.6	51.9	11.0	7.8	18.8
Wauzeka	32.8	9.3	42.3	10.7	4.5	15.2

Table III—Continued.

County and Towns.	New England States.	Southern States.	South Western States.	Unknown Illegible.	Miscellaneous.
Crawford county	5.4	1.5	.40	.16	.03
Clayton	4.1	1.4	.24		
Eastman	2.8	.6	.60	.75	
Freeman	8.7	.5	.12		
Haney	5.8	3.2	.21		.21
Lynxville	3.8	.7		.03	
Marietta	5.6	4.4	.14		
Prairie du Chien	5.1	1.3	.8	.6	.04
Scott	6.6	4.0	.6	.3	
Seneca	4.0	.8			
Utica	10.4	1.7	1.6		
Wauzeka	4.0	.01		1.6	.01

Table III—Continued.

County and Town.	British America.	British Isles.	Scandinavia.	German States.	Bohemia.	Rest Europe.	Total Foreign.	Miscellaneous.
Crawford county	3.7	11.6	4.4	5.1	.63	1.5	27.4	.18
Clayton	2.1	9.5	7.4	.7		.3	20.7	
Eastman	6.0	17.0	4.0	5.2		2.6	35.6	.12
Freeman	1.5	19.7	24.2	2.0		.77	49.4	
Haney .....	.8	8.0	2.1	1.9		.86	13.8	
Lynxville	3.4	6.4		1.1		.03	11.4	
Marietta	3.3	7.9	.14	2.8		.14	14.4	
Prairie du Chien	6.6	13.0	.33	8.1	1.3	3.0	32.8	.33
Scott .....	.6	11.1		.3			12.3	.3
Seneca .....	.4	25.8		3.1	1.3	2.1	32.8	
Utica .....	.3	7.5	8.0	.6		.22	16.8	
Wauzeka	3.1	11.1	1.0	17.3	2.2	1.7	36.7	.14

Table IV—COMPARISON OF PERCENTAGES OF NATIVITY OF POPULATION OF RICHLAND COUNTY, AS SHOWN BY THE UNITED STATES CENSUS OF 1880.

County and Towns.	Wisconsin.	North Western States — Wisconsin	Total North Western States.	New York.	Middle States — New York.	Total Middle States.
Richland county	27.8	31.1	58.3	12.4	7.7	20.1
Akan	31.9	31.0	62.9	3.2	7.9	11.1
Bloom	21.7	66.8	88.5	3.0	2.2	5.2
Buena Vista	24.1	18.6	43.7	25.9	9.7	35.6
Dayton	23.3	36.6	59.9	5.9	15.6	21.5
Eagle	33.3	41.4	71.7	3.1	5.6	8.7
Forest	22.8	31.9	54.7	12.2	23.2	35.4
Henrietta	30.9	26.6	57.5	11.8	3.7	15.5
Ithaca	27.4	10.8	38.2	20.5	2.1	22.6
Marshall	21.7	47.1	68.8	3.0	7.2	10.2
Richland	26.4	24.0	60.4	12.6	6.5	19.1
Richmond	31.2	30.7	61.9	6.2	12.9	19.1
Richwood	37.2	20.9	68.1	5.8	4.9	10.7
Rockbridge	27.5	21.8	49.3	14.7	5.5	20.2
Sylvan	22.7	49.9	72.6	6.9	16.0	22.9
Westford	32.3	19.1	51.4	7.8	3.4	11.2
Willow	30.8	23.5	54.3	23.7	4.9	28.6

Table IV—Continued.

County and Towns.	New England States.	Southern States.	South Western States.	Unknown Illegible.	Miscellaneous.
Richland county	5.4	4.4	3.40	.1	.04
Akan	1.5	2.6	.30	.3	.....
Bloom	0.2	4.4	.....	.2	.....
Buena Vista	11.4	1.1	.....	.3	.20
Dayton	2.4	3.8	.40	.....	.....
Eagle	0.8	8.1	.80	.....	.....
Forest	1.2	4.8	.....	.....	.....
Henrietta	4.2	.5	.....	.....	.....
Ithaca	10.1	3.2	.30	.10	.....
Marshall	1.5	2.5	.40	.....	.....
Richland	10.8	3.6	.20	.09	.03
Richmond	0.5	4.7	.17	.....	.....
Richwood	2.9	7.2	.64	.24	.....
Rockbridge	15.0	6.8	.....	.....	.....
Sylvan	2.2	1.4	.27	.55	.....
Westford	1.9	9.5	.24	.....	.....
Willow	4.7	3.6	.....	.....	.....

Table IV—Continued.

County and Towns.	British America.	British Isles	Scandinavia	German States.	Rest Europe.	Total Foreign.	Miscellaneous.
Richland county	1.63	4.90	.85	2.70	.45	10.40	.61
Akan	1.20	11.70	4.70	3.50	.....	22.28	1.20
Bloom	.....	1.50	.....	.....	.....	1.20	.....
Buena Vista	2.79	3.10	.10	1.90	.50	8.60	.10
Dayton	.40	7.50	.....	4.04	.....	11.90	.....
Eagle	.13	12.20	2.40	.55	.40	6.70	.....
Forest	1.06	12.10	.....	.71	.....	3.90	.....
Henrietta	3.90	14.12	.....	.....	.23	18.20	.....
Ithaca	4.20	12.90	.....	7.80	.05	15.45	.....
Marshall	3.02	13.20	.....	.4	16.60	16.70	.....
Richland	.83	3.40	.....	1.02	.40	5.70	.....
Richmond	2.01	1.50	.....	6.80	1.30	11.76	.....
Richwood	1.80	3.60	4.50	.40	.....	19.10	.....
Rockbridge	.26	8.06	.....	.40	.....	8.80	.....
Sylvan	.....	2.20	.....	.30	3.05	3.10	.....
Westford	.48	7.20	2.20	15.60	.....	25.60	.....
Willow	.89	4.6	.....	.70	2.70	8.90	.....

Table V—NATIVITY OF CRAWFORD COUNTY BY TOWNS AS SHOWN BY CENSUS OF 1880.

Towns.	Illinois.	Indiana.	Iowa.	Michigan.	Minnesota.	Ohio.	Wisconsin.	Delaware.	Maryland.	New Jersey.	New York.	Pennsylvania.
Clayton	34	68	1	3	127	226	2	5	13	93	39	
Eastman	51	5	7	3	13	241	11	2	7	109	24	
Freeman	49	7	10	5	60	160	11	6	50	41		
Haney	31	27	2	3	85	125	1	1	29	36		
Lynxville	21	15	2	3	42	73	11	1	1	29	33	
Marletta	58	32	3	4	66	222	11	3	2	48	54	
Prairie du Chien	48	18	20	21	10	93	823	3	3	28	54	
Seneca	10	3	3	3	28	58	1	3	3	12	30	
Scott	4	39	3	2	46	91	1	1	3	40	40	
Utica	31	24	3	1	61	202	1	1	3	60	45	
Wauzeka	20	5	3	2	33	222	1	1	1	73	30	
Totals	357	240	52	46	14	654	2443	4	23	47	881	457

Total Northwestern States 3,706

Total Middle States 1,412

Table V—Continued.

County and Towns.	Wisconsin.	Northwest States — Wisconsin.	Total Northwest States.	New York.	Middle States — New York.	Total Middle States.
Crawford county	2,443	1,363	3,806	381	531	1,412
Clayton	226	230	3,456	93	59	152
Eastman	241	82	323	109	43	152
Freeman	160	131	291	50	58	108
Haney	125	145	270	51	37	83
Lynxville	73	83	156	39	24	63
Marletta	222	163	385	49	79	128
Prairie du Chien	823	210	1,033	289	96	385
Scott	91	92	183	30	40	70
Seneca	58	41	99	29	15	44
Utica	202	123	325	69	49	118
Wauzeka	222	63	285	73	31	104

Table V—Continued.

Towns.	Connecticut.	Maine.	Massachusetts.	N. Hampshire.	Rhode Island.	Vermont.	Oregon.	Kansas.	California.
Clayton	6	6	8	2	13	1	1	1	1
Eastman	7	7	2	1	6	1	1	1	1
Freeman	3	9	52	2	1	1	1	1	1
Haney	5	1	16	3	1	1	1	1	1
Lynxville	1	1	1	1	1	1	1	1	1
Marletta	2	5	19	2	1	2	1	1	1
Prairie du Chien	25	10	35	12	2	38	1	1	1
Scott	4	4	8	1	1	5	1	1	1
Seneca	1	3	3	2	3	3	1	1	1
Utica	9	3	11	3	30	1	1	1	1
Wauzeka	3	3	7	1	16	1	1	1	1
Totals	63	45	147	36	5	145	1	1	1

Total New England States 441

Total Western States 2

Table V—Continued.

County and Towns.	New England States.	Southern States.	Southwest States.	Unknown Illegible.	Miscellan- ous.*
Crawford county	441	127	34	14	16
Clayton	34	12	2	.....	4
Eastman	23	5	5	.....	1
Freeman	68	4	2	.....	.....
Haney	23	15	1	.....	1
Lynxville	10	2	.....	1	.....
Marietta	38	30	1	.....	.....
Prairie du Chien	122	33	19	13	8
Scott	22	13	2	.....	1
Seneca	9	2	.....	.....	.....
Utica	65	11	1	.....	.....
Wauzeka	27	1	.....	3	1

Total New England, Southern, Southwestern States, Un-
known, Illegible and Miscellaneous 633

Table V—Continued.

Towns.	Georgia.	Kentucky.	Mississippi	North Carolina.	Tennessee.	Virginia.	Missouri.	Arkansas.	Louisiana.
Clayton .....	.....	3	.....	.....	2	7	2	.....	.....
Eastman	2	.....	1	.....	2	.....	5	.....	.....
Freeman .....	.....	3	.....	.....	1	.....	.....	1	.....
Haney .....	.....	9	.....	.....	.....	6	1	.....	.....
Lynxville .....	.....	.....	.....	.....	.....	2	.....	.....	.....
Marietta	1	11	.....	1	5	10	1	1	1
Prairie du Chien	1	10	1	.....	2	17	19	.....	2
Scott .....	.....	3	.....	.....	.....	10	2	.....	.....
Seneca .....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Utica .....	.....	6	.....	.....	.....	4	1	.....	.....
Wauzeka .....	.....	.....	.....	1	.....	.....	.....	.....	.....
Totals	4	45	2	2	15	56	31	2	3

Total Southern and Southwestern States 160

*Miscellaneous includes five born in Mexico; four, at sea; two, British Possessions (unclassified); one each in Java, Victory, Beroes, Jerustac,† and Rocky Mountains (not specified).

†This word while not absolutely illegible was not plain enough to enable the writer to locate the place.

Table V—Continued.

County and Towns.	Canada.	Upper Canada.	Lower Canada.	East Canada.	West Canada.	New Brunswick.	Red River North.	Prince Edward Isle.
Crawford county	188		13	57	27	8	6	1
Clayton	5			12		1		
Eastman	55			11	12			
Freeman	5					7		
Haney	4							
Lynxville	22							
Marletta	22							
Prairie du Chien	38		13	38	15		6	
Scott	2							
Seneca	1							
Utica	18							
Wauzeka	15			5				1

Total, British America 300

Table V—Continued.

Towns.	England.	Guernsey.	Ireland.	Scotland.	Wales.	Norway.	Sweden.	Denmark.
Clayton	14		66			61		
Eastman	29	3	99	9		32		
Freeman	24		59	1		188		1
Haney	19		18			10		
Lynxville	5		11	1				
Marletta	10		27	6	1		1	
Prairie du Chien	37		253	19	4	8		
Scott	9		27	1				
Seneca	30		25	4				
Utica	6		41			48	2	
Wauzeka	6		63	6		7		
Totals	189	3	699	47	5	254	3	1

Total, British Isles 943

Total, Scandinavia 358

Table V—Continued.

Towns.	Prussia.	Germany.	Wurtemberg.	Bavaria.	Mecklenberg.	Baden.	Saxony.
Clayton		6					
Eastman	8	5	1	1	16	1	
Freeman	8	3					3
Haney				1		1	8
Lynxville							
Marletta	3	2	12			1	
Prairie du Chien	57	24	31	18	3	16	7
Scott		1					
Seneca	2		1				
Utica	1	1		2			
Wauzeka	84	3	8	3	3	2	3
Totals	163	60	53	25	22	21	21

Total for Prussia, Germany, Wurtemberg, Bavaria, Mecklenberg, Baden, and Saxony

365

Table V—Continued.

Towns.	Hesse Cassel.	Cronstadt.	Swabia.	Hanover.	Bern.*	Leipsic.	Darmstadt.
Clayton				2			
Eastman					1	1	
Freeman							
Haney							
Lynxville							2
Marietta				1			
Prairie du Chien	13	3	2	4			5
Scott							
Seneca							4
Utica							
Wauzeka	1			2	1		
Totals	14	3	2	9	2	1	11

Total, Hesse Cassel, Cronstadt, Swabia, Hanover, Bern,*
Leipsic, and Darmstadt 42

Table V—Continued.

Towns.	Dromberg.	Oldenberg.	Rhaelstadt.	Holstein.	Bremen.	Nassau.
Clayton						
Eastman	5					3
Freeman						
Haney						
Lynxville						
Marietta						
Prairie du Chien				4	1	
Scott						
Seneca						
Utica						
Wauzeka		5	4		2	
Totals	5	5	4	4	3	3

Total Dromberg, Oldenberg, Rhaelstadt, Holstein, Bremen,
and Nassau 24
Total German States 431

Table V—Continued.

Towns.	France.	Switzerland.*	Bohemia.	Austria.	Russia.	Holland.	Belgium.
Clayton	3						
Eastman	5	17		4		1	
Freeman	1	3		2			
Haney		4					
Lynxville	1						
Marietta		1					
Prairie du Chien	44	20	33	3		2	3
Scott							
Seneca	1	4	3				
Utica		1			1		
Wauzeka	4	5	15		4	1	
Totals	59	55	51	9	5	4	3

Total, Continental Europe, excluding Scandinavia and the
German States 186

*Specified on record as Bern in Germany.

*In the records all natives of towns written "Berne," "Burne" and "Bern" were accredited to Switzerland with the exception of those stated to have been born in "Bern," Germany.

Table VI—NATIVITY OF RICHLAND COUNTY BY TOWNS, AS SHOWN BY CENSUS OF 1880.

County and Towns.	Illinoi.	Indiana.	Iowa.	Michigan.	Minnesota.	Ohio.	Wisconsin.	Delaware.	Maryland.	New Jersey.	New York.	Pennsylvania
Richland county	366	1101	14	41	6	1506	2710	7	41	42	1213	663
Akan	20	69	1	7	1	18	169	1	2	1	11	25
Bloom	16	114	22	7	1	214	135	1	6	16	16	10
Buena Vista	40	22	7	3	1	113	252	1	6	16	249	70
Dayton	18	65	1	1	1	95	115	1	4	2	28	71
Eagle	17	190	1	1	1	39	241	1	3	4	83	34
Forest	21	101	1	1	1	58	129	1	3	1	69	128
Henrietta	31	33	1	1	1	51	132	1	1	1	51	14
Ithaca	25	26	5	7	1	44	261	1	2	1	290	16
Marshall	5	37	1	1	1	205	115	1	4	1	16	34
Richland	38	113	1	4	1	210	284	1	1	1	135	67
Richmond	26	81	1	3	1	72	186	1	4	5	37	63
Richwood	73	86	3	3	1	74	289	1	1	1	45	36
Stockbridge	17	23	1	3	1	75	150	1	3	1	80	26
Sylvan	7	77	1	1	1	93	82	1	3	1	25	45
Westford	42	1	1	1	1	34	132	1	6	1	32	7
Willow	12	22	2	9	1	60	133	1	9	106	13	13

Total Northwestern States 5,744

Total Middle States 1,966

Table VI—Continued.

County and Towns.	Wisconsin.	Northwest States — Wisconsin.	Total Northwest States.	New York.	Middle States — New York.	Total Middle States.
Richland county ..	2,710	3,034	5,744	1,213	753	1,966
Akan	109	106	215	11	27	38
Bloom	115	352	467	16	12	28
Buena Vista	232	179	411	249	93	342
Dayton	115	181	296	29	77	106
Eagle	240	238	538	22	41	63
Forest	129	180	309	69	131	200
Henrietta	133	115	248	51	16	67
Ithaca	261	103	364	290	20	310
Marshall	115	249	364	16	38	54
Richland	284	366	650	135	30	235
Richmond	186	183	369	37	77	114
Richwood	289	240	529	45	38	83
Rockbridge	150	119	269	80	20	110
Sylvan	82	180	262	25	47	72
Westford	132	78	210	32	14	46
Willow	138	106	243	106	22	128

Table VI—Continued.

Towns.	Connecticut.	Maine.	Massachusetts.	New Hampshire.	Rhode Island.	Vermont.	Missouri.	Arkansas.	Kansas.	Oregon.
Richland county	25	43	75	51	26	244	34	2	1	3
Akan	1				2	2	1			
Bloom						1				
Buena Vista	25	13	25	9	7	31				
Dayton	2	7	1			2	1	1		
Eagle			2			4	6			
Forest	1		2		2	2				
Henrietta	11	1	1	1		14				
Ithaca	30	6	13	11	5	41	2	1		
Marshall	2		1			5	2			
Richland	20		22	22	5	47	2	1	1	
Richmond			2			1	13			
Richwood	3	2	2	2		14	5			
Rockbridge	2	11	1	4	2	62				
Sylvan		1	2			5	1			
Westford	4			1	2		1			
Willow	4	2	1	1	1	12				
Total, New England States	524									
Total, Southwestern States	36									
Total, Western States	4									

Table VI—Continued.

County and Towns.	New England States.	Southern States.	Southwest States.	Unknown Illegible.	Miscellaneous.
Richland county	524	430	36	11	4
Akan	5	9	1	1	
Bloom	1	23		1	
Buena Vista	110	11		3	3
Dayton	12	19	2		
Eagle	6	58	6		
Forest	7	27			
Henrietta	18	20			
Ithaca	96	30		1	
Marshall	8	13	3		
Richland	116	39	2		
Richwood	3	28	13	1	1
Richmond	23	56	5	2	
Rockbridge	82	37			
Sylvan	8	5	1	2	
Westford	8	39	1		
Willow	21	16			

Total, New England States, Southern States, Southwestern States, Unknown and Illegible, and Miscellaneous States 1,005

Table VI--Continued.

Towns.	Georgia.	Kentucky.	Louisiana.	Mississippi.	North Carolina.	South Carolina.	Tennessee.	Virginia.
Richland county	1	125	2	7	30	9	57	199
Akan		1			3		3	2
Bloom		5					3	15
Buena Vista		2			1			8
Dayton		10			2	2		5
Eagle		16			11	3	5	23
Forest	1	14						13
Henrietta		7			1		1	11
Ithaca				6				24
Marshall	2							13
Richland		25					1	12
Richmond		9			1	2	4	12
Richwood	1	19			7	1	12	16
Rockbridge		11						26
Sylvan		2						3
Westford		2		1	3	1	2	8
Willow							6	8

Total, Southern States 430

Table VI--Continued.

County and Towns.	Canada.	Upper Canada.	Lower Canada.	East Canada.	West Canada.	New Brunswick.	Nova Scotia
Richland county	3	52	46	22	21	2	10
Akan		1	3				
Bloom							
Buena Vista	2	21	3				1
Dayton		2					
Eagle			1				
Forest					3		3
Henrietta		14					3
Ithaca		12	18	10			
Marshall			1	9	5	1	
Richland	1	1	1	1	1	1	3
Richmond				1	11		
Richwood			13				
Rockbridge			2	1			
Sylvan							
Westford			2				
Willow		1	2		1		

Total, British America 156

Table VI—Continued.

County and Towns.	England.	Ireland.	Scotland.	Wales.	Norway.	Sweden.
Richland county	176	254	43	5	75	5
Akan	4	24	9	3	16	
Bloom	4	2		1		
Buena Vista	15	7	8		1	
Dayton	14	10			24	
Eagle	13	2	1			
Forest	8	4				
Henrietta	9	51	1			
Ithaca	13	13	2			
Marshall	29	31	10			
Richland	21	16				
Richmond	6	3				
Richwood	13		3	1	33	
Rockbridge	19	20	5			
Sylvan			2			
Westford	5	23			4	5
Willow	3	18				

Total, British Isles 478
 Scandinavia 83

Table VI—Continued.

County and Towns.	Prussia.	Germany.	Wurtemberg.	Bavaria.	Mecklenberg.	Baden.
Richland county	198	1	12	9	4	8
Akan	3		1			4
Bloom						
Buena Vista	9					2
Dayton	10		5	1		1
Eagle	2			2		
Forest	3	1				
Henrietta						
Ithaca	71			1		1
Marshall	3					
Richland	3				4	
Richmond	28		2	1		
Richwood				1		
Rockbridge	2					
Sylvan	1					
Westford	64					
Willow				3		

Total, Prussia, Germany, Wurtemberg, Bavaria, Mecklenberg, and Baden 232

Table VI—Continued.

County and Towns.	Saxony.	Hesse Cassel.	Frankfort.	Nassau.	Houssen.	Hanover.	Darmstadt.
Richland county	14	1	1	6	1	3	2
Akan	4						
Bloom	4						
Buena Vista		1					2
Dayton							
Eagle							
Forest							
Henrietta						1	
Ithaca							
Marshall							
Richland	1		1		1	1	
Richmond	4			6			
Richwood	1					1	
Rockbridge							
Sylvan							
Westford							
Willow							

Total, Saxony, Hesse Cassel, Frankfort, Nassau, Houssen,
Hanover, and Darmstadt 28
Total, German States 290

Table VI—Continued.

County and Towns.	France.	Switzerland.	Austria.	Berne.	Russia.	Spain.	Miscellan- eous.
Richland county	31	4	2	1	1	1	1
Akan							
Bloom							
Buena Vista	1	3	1	1			1
Dayton							
Eagle	2						
Forest							
Henrietta			1				
Ithaca	4						
Marshall							
Richland	2				1	1	
Richmond	8						
Richwood							
Rockbridge							
Sylvan	2						
Westford							
Willow	12						

Total, Miscellaneous and Continental Europe, excluding
Scandinavia and the German States 41

Table VI—Continued.

County and Towns.	British America.	British Isles.	Scandinavia.	German states.	Rest Southern Europe.	Total Foreign Born.
Richland county	156	478	83	260	40	1,018
Akan	4	40	16	12		76
Bloom		7				7
Buena Vista	27	30	1	19	5	83
Dayton	2	37		20		59
Eagle	1	16	24	4	3	48
Forest	6	12		4		22
Henrietta	17	61			1	79
Ithaca	40	28		75	5	147
Marshall	16	70		2		88
Richland	9	37		11	4	61
Richmond	12	9		41	8	70
Richwood	14	28	33	2		26
Rockbridge	2	44		2		48
Sylvan		8		1	2	11
Westford	2	30	9	64		105
Willow	4	21		3		28

OCCUPATIONS.

The following is the classification which was followed in grouping the occupations as they are given in the United States Census Reports, which apply to both Crawford and Richland counties.¹

I. *Laborers*.—Servants, wood-choppers, sawyers, railroad hands, loggers, and lumbermen (with no capital).

II. *Capitalists and Merchants*.—Hotel-keepers, inn-keepers, leather dealers, wheat buyers, bankers, warehouse-men, jewelers, and if possessed of large enough capital, druggists, millers, lumbermen, brewers and land agents.

III. *Artisans and Mechanics*.—Gun-smiths, wood-turners, harness-makers, iron moulders, blacksmith, tanners, carpenters, stone cutters, mill wrights, brick makers, wagon-makers, coopers, shoe-makers, shingle-makers, tin-smiths, master masons, wheel-wrights, and saddlers.

IV. *Professional Men*.—Surveyors, artists, editors, printers and publishers, dentists, city engineers, school teachers, ministers, lawyers, physicians, music teachers.

¹The reports are supposed to give the occupations of males over fifteen years of age, but they frequently give those of boys fifteen years of age and these have been incorporated in the tables used in connection with this subject.

V. *Smaller Trades and Professions*.—Cooks, saloon-keepers, hostlers, teamsters, and all others who handle horses, express drivers, engineers (civil, steamboat, railway or stationary), peddlers, barbers, steamboat agents, auctioneers, telegraph agents, tobacconists, house-movers, waiters, millers, undertakers, apprentices, clerks, hat-colorers, chandlers, brewers, bar-tenders, weavers, tailors, watch-makers, painters, printers, nurserymen, plasterers, fiddlers, tinkers, book-keepers, well-diggers, whiskey dealers, silver-smiths, umbrella makers, firemen on railway, managers of news depots, cashiers, ticket agents, porters.

VI. *Petty Tradesmen*.—Ice dealers, butchers, bakers, grocers, traders, milkmen.

VII. *Miscellaneous*.—Sailors, raftsmen, stage drivers, students, gentlemen, gamblers, hunters and trappers, miners, pilots, steamboat hands, firemen on steamboats and railways.

VIII. *Agriculturists*.—Farmers, gardeners, stock owners and dealers in cattle, hogs, and horses.

IX. *Officials*.—County: Sheriffs, deputy sheriffs, registers of deeds, clerks in county offices. Town: Policemen and constables.

X. Unknown, not given or illegible.

Table VII—OCCUPATIONS FOR CRAWFORD COUNTY—1850.

Occupation.	Number employed.	Value of real estate.
Farmers	520	\$117,570
Laborers	173	6,400
Capitalists and merchants	68	75,650
Artisans and mechanics	72	10,794
Professional men	14	7,800
Smaller trades and professions	18	3,800
Petty tradesmen	10	2,350
Officials	8	2,400
Miscellaneous	13	2,550
Not Given, Illegible	12	.....
Totals	913	\$228,914

Table VIII—OCCUPATIONS FOR RICHLAND COUNTY—1850.

Occupations.	Number employed.	Value of real estate.
Farmers	200	\$80,301
Laborers	33	440
Capitalists and merchants	7	5,700
Artisans and mechanics	27	1,850
Professional	6	2,650
Smaller trades and professions	2	500
Not Given, Unknown or Illegible	5	300
Miscellaneous	3	430
Totals	283	\$92,171

Note—No personal estate is recorded for either Crawford or Richland county in 1850.

Table IX—OCCUPATIONS FOR CRAWFORD COUNTY—1860.

Occupations.	No.	Real Estate.	Personal Estate.
County:			
Artisans and mechanics	131	\$76,810	\$24,662
Capitalists and merchants	106	328,535	178,669
Farmers	1,014	696,359	145,934
Illegible	2	200	200
Laborers	403	16,525	11,989
Miscellaneous	54	53,800	28,420
Not given	8	20,500	13,575
Petty trades	14	4,900	3,975
Professional	38	189,000	19,585
Small trades, professions, etc.	123	29,550	10,775
U. S. officials	8	20,500	13,575
Clayton:			
Artisans and mechanics	10	\$3,400	\$1,085
Capitalists and merchants	6	18,975	5,177
Farmers	114	75,130	19,474
Laborers	33	500	699
Not given	25	400	150
Officials			
Professionals	1		
Smaller trades and professions			
Eastman:			
Artisans and mechanics	11	\$2,250	\$430
Capitalists and merchants	4	6,300	1,550
Farmers	157	166,891	20,368
Laborers	24	500	380
Not given	21		
Officials	1		
Professional	2	700	225
Smaller trades and professions	3	2,000	275
Freeman:			
Artisans and mechanics	17	6,100	1,765
Capitalists and merchants	4	43,500	27,065
Farmers	119	76,128	15,465
Laborers	55	1,200	1,719
Not given	27	2,700	50
Professional	2	5,300	400
Smaller trades and professions	2	400	200
Haney:			
Artisans and mechanics	4	400	475
Capitalists and merchants	2	3,000	475
Farmers	86	52,680	11,240
Laborers	25	1,350	770
Not given	7		
Professional	2	1,000	80
Smaller trades and professions	1		75

Table IX — Continued.

Occupations.	No.	Real Estate.	Personal Estate.
Lynchville:			
Artisans and mechanics	11	\$8,250	\$1,100
Capitalists and merchants	6	7,100	3,100
Farmers	25	16,195	5,395
Laborers	29	2,300	1,155
Miscellaneous	4		575
Not given			
Professional	2	100	165
Smaller trades and professions	1		
Marietta:			
Artisans and mechanics	15	5,600	2,215
Capitalists and merchants	2	8,000	750
Farmers	95	52,550	13,555
Laborers	45	425	685
Miscellaneous	7	1,200	445
Not given	19		
Professional	2	700	190
Smaller trades and professions	2		50
Scott:			
Artisans and mechanics	2	700	250
Capitalists and merchants			
Farmers	56	30,850	7,967
Laborers	16	300	165
Not given	5		
U. S. and other officials	2	900	400
Seneca:			
Artisans and mechanics	10	9,875	1,090
Capitalists and merchants	2	1,200	900
Farmers	45	38,315	5,975
Laborers			
Not given	3		
U. S. and other officials	1	3,000	100
Prairie du Chien:			
Artisans and mechanics	103	34,610	22,405
Capitalists and merchants	67	206,670	131,950
Farmers	79	47,100	19,255
Laborers	98	6,850	4,680
Illegible	2	200	200
Miscellaneous	43	52,600	27,400
Not given	25	600	500
Petty trades	13	4,900	3,900
Professional	25	180,400	16,825
Smaller trades and professions	108	25,350	9,800
Wauzeka			
Artisans and mechanics	18	4,250	1,487
Capitalists and merchants	4	4,100	3,100
Farmers	106	53,500	14,305
Laborers	54	1,300	1,400
Illegible			
Miscellaneous			
Not given	12		
Petty trades	2		
Professional	2	800	1,600
Smaller trades and professions	6	600	125
Utica:			
Artisans and mechanics	20	5,375	1,860
Capitalists and merchants	6	28,900	4,350
Farmers	102	87,000	12,885
Laborers	24	1,800	425
Not given	18		
Smaller trades and professions	1	1,200	325

Table X—OCCUPATIONS FOR RICHLAND COUNTY—1880.

Occupations.	No.	Real Estate.	Personal Estate.
Richland county:			
Artisans and mechanics	154	\$78,725	\$27,275
Capitalists and merchants	87	154,750	72,150
Farmers	1,434	1,400,560	568,307
Laborers	495	14,345	19,014
Miscellaneous	18	28,500	9,460
Petty trades	3	4,500	700
Professional	69	103,075	22,100
Smaller trades and professions	44	11,290	6,275
U. S. officers	3	4,600	1,400
Akan:			
Artisans and mechanics			
Capitalists and merchants			
Farmers	61	\$46,100	\$19,950
Laborers	16		890
Professional	1	1,000	500
Bloom:			
Artisans and mechanics	3	500	350
Capitalists and merchants	5	8,200	2,400
Farmers	83	78,350	27,710
Laborers	18	200	700
Professional	3	150	350
Buena Vista:			
Artisans and mechanics	34	10,450	4,195
Capitalists and merchants	18	33,600	11,900
Farmers	129	138,325	49,591
Laborers	41	1,850	1,191
Miscellaneous	1		
Professional	20	20,500	4,500
Smaller trades and professions	17	4,800	2,025
Dayton:			
Artisans and mechanics	8	5,200	1,500
Capitalists and merchants	2	3,500	900
Farmers	74	60,050	22,545
Laborers	23	350	530
Miscellaneous			
Professional	1	2,000	600
Eagle:			
Artisans and mechanics	4	800	1,250
Capitalists and merchants			
Farmers	105	111,000	45,206
Laborers	33	975	1,595
Miscellaneous	2		
Professional	1	15,000	1,600
Smaller trades and professions	1		100
Forest:			
Artisans and mechanics	2	700	700
Capitalists and merchants	2	5,000	2,100
Farmers	95	84,700	31,440
Laborers	27	250	685
Miscellaneous			
Professional	1		
Smaller trades and professions			
Henrietta:			
Artisans and mechanics	5	3,550	800
Capitalists and merchants	4	5,500	1,150
Farmers	69	54,250	23,170
Laborers	23	250	685
Miscellaneous			
Professional			
Smaller trades and professions	1		
Ithaca:			
Artisans and mechanics	12	6,050	2,970
Capitalists and merchants	6	14,300	7,800
Farmers	154	204,280	52,965
Laborers	42	800	1,305
Miscellaneous	3	13,300	4,250
Professional	6	11,400	2,450
Smaller trades and professions	1		100

Table X — Continued.

Occupations.	No.	Real Estate.	Personal Estate.
Marshall:			
Artisans and mechanics	1		300
Capitalists and merchants			
Farmers	97	82,880	28,925
Laborers	30	1,200	600
Miscellaneous			
Officers			
Petty trades			
Professional	1	1,500	400
Smaller trades and professions	1		50
Richland:			
Artisans and mechanics	54	35,025	9,285
Capitalists and merchants	17	61,000	32,750
Farmers	109	112,100	25,425
Laborers	40	2,410	1,770
Miscellaneous	4	3,700	2,000
Officers	3	2,600	900
Petty trades	3	4,500	700
Professional	23	45,200	8,275
Smaller trades and professions	15	3,340	2,025
Richmond:			
Artisans and mechanics	13	10,200	2,100
Capitalists and merchants	6	14,250	9,200
Farmers	66	71,850	20,310
Laborers	29	2,900	1,193
Miscellaneous	4	7,800	2,400
Officers	1	2,000	500
Professional	6	1,500	1,300
Smaller trades and professions	6	3,150	1,575
Richwood:			
Artisans and mechanics	10	3,050	1,850
Capitalists and merchants	6	8,400	3,700
Farmers	98	126,100	40,480
Laborers	50	2,640	3,175
Miscellaneous	3	1,200	600
Officers			
Professional	3	3,800	1,700
Smaller trades and professions	2		400
Rockbridge:			
Artisans and mechanics	2		200
Farmers	90	62,150	29,950
Laborers	45	950	1,800
Professional	2	425	225
Sylvan:			
Artisans and mechanics			
Farmers	67	45,175	18,390
Laborers	23		50
Professional			
Westford:			
Artisans and mechanics	3	2,200	475
Capitalists and merchants			
Farmers	59	56,500	110,085
Laborers	21	100	630
Miscellaneous			
Professional	1	600	200
Willow:			
Artisans and mechanics	2	1,000	800
Capitalists and merchants	1	1,000	300
Farmers	78	66,250	22,175
Laborers	34	200	950
Miscellaneous	1	2,500	200
Professional			

Table XI—PER CAPITA WEALTH OF FARMERS.

1850

Crawford county	\$226 09
Bad Ax	177 02
Black River	184 43
Prairie du Chien	262 71
Richland county	401 50

1860

	Real Estate.	Personal Estate.
Crawford county	\$686 72	\$143 91
Clayton	521 73	135 24
Eastman	1,063 00	129 73
Freeman	659 73	129 95
Haney	612 55	130 69
Lynxville	647 80	215 80
Marietta	553 15	142 69
Prairie du Chien	596 20	243 73
Scott	550 89	142 26
Seneca	851 44	132 77
Utica	852 94	126 32
Wauzeka	504 71	135 42
Richland county	976 68	396 30
Akan	755 73	327 04
Bloom	950 00	333 85
Buena Vista	1,072 28	384 42
Dayton	811 48	304 66
Eagle	1,067 14	430 53
Forest	891 57	330 94
Henrietta	786 23	335 79
Ithaca	1,326 49	343 92
Marshall	854 43	298 19
Richland	1,028 44	396 30
Richmond	1,088 63	307 72
Richwood	1,286 73	413 07
Rockbridge	690 55	332 77
Sylvan	674 25	274 47
Westford	957 62	1,866 01
Willow	849 35	284 29

Some of the characteristic occupations of this period have been grouped under the general head of miscellaneous.

Crawford County, 1850:

Prairie du Chien, three miners; pilot; ferryman; two hunters, one student.

Bad Ax, ———.

Black River, three hunters; one raftsmen.

Richland County, 1850:

Ferryman; raftsmen; hunter and trapper.

Crawford County, 1860:

Lynxville, four boatmen.

Marlette, bee hunter; two raftsmen; four ferrymen.

Prairie du Chien, one gentleman, seven steamboat hands; two steamboat engineers; two steamboat firemen; four pilots; two boatmen; agent for stage and boat companies; steamboat captain; steamboat mate; sailor; runner for P. H. serving-man; draper; ten students; railroad warehouseman; railroad watchman; two miners; mail-man; agent Sunday School Union; section boss on railroad; steamboat hand.

Richland County, 1860:

Richland, stage driver; miner; two gentlemen.

Buena Vista, student.

Eagle, two miners.

Ithaca, speculator; two gentlemen.

Richmond, two miners; ferryman; gentleman.

Richwood, ferryman; raftsmen; gentleman.

Willow, gentleman.

PART V.

Laws Governing State Officers, Departments, Boards, Commissions, Institutions, Agents and Agencies.

The laws of the state not being readily available to the general public, it is hoped that the compilation of laws, which follow, will prove of service to those seeking information as to the business of the state and the legal relation of the various departments to each other. In presenting this information, the general object in view has been to exhibit in a condensed form the powers, duties and privileges of each of the various officers and agencies, departments, boards, commissions and institutions of the state, and also the expenses attending each for the fiscal year ending September 30, 1900, classified for ready comparison.

The synopsis has been made from the Wisconsin Statutes of 1898 as amended by the Session laws of 1899 and 1901. The references are to sections and pages of the Statutes and Session laws as indicated, which should be consulted if more definite or specific information is desired.

The relation existing between the Governor, Secretary of State and State Treasurer, and the other officers and departments makes it necessary to recite their duties and powers rather more specifically than is attempted in treating the other elective officers and employes of the state government. This is particularly true in the case of the Executive. It will be noticed that the various heads of state departments have many duties to perform in connection with each other, the act of one

being necessary to supplement or make valid the act of another. Because of this, under the laws relating to the Governor there is shown his special duty or power in connection with the several departments, institutions or branches of the government.

The expenses of each office, department, board or institution are compiled from the reports (for the year ending September 30, 1900) of the Secretary of State, the Superintendent of Public Property and Commissioners of Public Printing, all of which are bound in one volume.

All branches of the state government, including boards, societies and institutions whose disbursements have not been recently treated as under the control of the state Auditor, are affected by the provisions of chapter 433 of the laws of 1901, which provides that all money collected by officers, agents or employees of the state or any of its institutions, departments, boards, societies and commissions, or for or on behalf of the state, shall be paid promptly into the state treasury and not paid out except on warrants of the Secretary of State in his capacity as Auditor on itemized vouchers in favor of the claimants. Provision is also made by the accounting system, which was adopted pursuant to chapter 133, of the laws of 1899, and provided to be established by chapter 433, laws of 1901, which will include in the records of the Auditor from day to day the itemized current expenses of state boards, societies, commissions and institutions that have heretofore drawn the amounts appropriated for their support in lump sums and have disbursed the money free from the control and supervision of the state authorities.

The anticipated effect of this law is that state officers who are called upon to pass upon public expenditures will be able to ascertain at all times the exact condition of each fund, the unused balance thereof available, the current receipts and disbursements of each and all of the departments of government including the charitable, reformatory, educational and penal institutions, the Board of Control, the Board of University Regents, the Board of Normal School Regents, the State Historical Society to the officers, agents, employees thereof and to every per-

son, officer, agent or employee who by virtue of his office receives and collects any money for or on behalf of the state or any of its agencies.

The act referred to, which is given in full below, provides that the Governor shall establish the proposed system and may make changes in order to adopt it to various departments, provided that certain fundamental requirements named in the act are observed.

The Wisconsin Supreme Court declared:

"The Secretary of State, being made Auditor by the constitution, his function as such can not be transferred wholly or partly to any other person or officer." (10 Wis., star page 525, and 82 Wis., 39.) But notwithstanding this, many laws have been enacted during recent years in which language has been used giving a color of authority for auditing to be done by officers or members of Boards in charge of state business. This has resulted in unbearable confusion.

The act adopting the proposed plan of accounting to be installed under the Governor's direction in effect abrogates all such provisions of law, many of which, however, are included in this compilation because of the uncertainty as to the final effect of certain provisions which may be modified by the Executive.

CHAPTER 433.

AN ACT to provide a central system of accounting for all state officers and state institutions.

Governor to establish Central Accounting System. He may employ assistants.

Section 1. It shall be the duty of the governor to take such action, and to employ such assistants as in his discretion he may deem necessary to effectively establish in this state a central system of state accounting so that said system when established shall apply to all departments of the state and to all charitable, penal, reformatory and educational institutions of the state, and to the state board of control, the board of regents of the normal schools, the regents of the university of Wisconsin, the state historical society and to the officers, agents and employes of the same, and to each and every board, society, commission, association, and to every officer, agent or employe thereof or of the state who by virtue of his office receives, collects or disburses any money.

All State Departments, all Char. Ref., Penal and Educational Institutions, all Societies, Boards, Commissions, Branches and Agencies and all persons, officers, agents or employes thereof or of the state are included in the system and shall make such reports as the governor may require.

Section 2. All persons, boards, officers and agents mentioned in section one of this act shall make reports in such form and of such facts as may be required by the governor in order to put said system into practice.

System adopted under Ch. 133, L. 1899, to be established except as changed by governor to adapt it to various departments; provided, however, that it shall require that—

Section 3. The system provided and adopted under the provisions of chapter 133 of the laws of 1899, shall so far as practicable be carried into effect except in so far as it may be changed by the governor in order to adapt it to the several departments mentioned in section one, of this act; provided that the system adopted shall require:

All state money received by every person on behalf of state or any of the institutions, boards, commissions, departments, etc., etc., named above, shall be deposited with the treasurer every week or oftener if Governor requires, accompanied by explanatory statement as Governor may require.

1st. That all moneys collected or received by each and every person for or in behalf of the state, or in behalf of any of the boards, associations, commissions, societies or institutions mentioned in section one, of this act, shall be by him deposited with, or transmitted to the state treasury or to a state depository des-

igned by the treasurer. Such deposit shall in every case be made at least once a week and oftener if required by the governor, and at the time of the transmission or deposit a statement in such form as the governor may designate showing the amount of such collection, from whom and for what purpose or on what account the same was received, shall be transmitted to the treasurer.

Treasurer to issue his receipt therefor, countersigned by Secretary of State.

2nd. The treasurer shall transmit to every person, depositing money with him a receipt therefor countersigned by the secretary of state.

Money shall be paid out only on warrants signed by Secretary of State on itemized vouchers showing for what purpose draft has been transacted.

3rd. No money shall be paid out of the state treasury except on warrant drawn by the secretary of state, who shall require in all cases an itemized voucher showing for what purpose the debt has been contracted.

Official receipt blanks to be prescribed by Governor and prepared and issued by Secretary of State to all persons who receive money for state or its institutions, boards, commissions, societies, etc.; Secretary of State to charge such blanks to such persons and require an accounting therefor.

4th. The secretary of state shall prepare official blank receipts in such form as the governor shall prescribe, and furnish such official receipts to each person who collects or receives any money for or on behalf of the state, or for any of the boards, associations, commissions, societies or institutions mentioned in section one of this act, and such person shall issue such official receipts to each person from whom he shall receive any money. All such official receipts shall be numbered consecutively, and the secretary of state shall keep a true account of all such receipts furnished to any person and require of such person a true accounting for the same.

Certificates of proper officers or boards as to correctness of accounts to be evidence thereof.

Section 4. The certificate of the proper officers of the board of regents of the normal schools, the regents of the university of Wisconsin, the state board of control, or the proper officers of any other board or commission organized or established by the state, shall in all cases be evidence of the correctness of any account which may be certified by them.

Those issuing official receipts, except in the manner provided, guilty of misdemeanor.

Section 5 Any person who shall issue or deliver such official receipt or pass or utter the same except in the manner required by law shall be deemed guilty of a misdemeanor.

If any person, officer, agent, board, etc., etc., mentioned in Sec. 1 fails to comply with this act, all moneys due such person may be withheld by Secretary of State if Governor approves.

Section 6. In case any person, officer, agent, board or association mentioned in section one of this act shall neglect or refuse to make such deposits of money or to make such reports as shall be required of them by this act, the secretary of state shall with the approval of the governor, withhold all moneys due such person until the provisions of this act are complied with.

Appropriations of sums sufficient to carry out this act.

Section 7. There is hereby appropriated out of any money in the treasury not otherwise appropriated, a sum sufficient to carry out the provisions of this act.

Section 8. This act shall take effect and be in force from and after its passage and publication.

Approved May 15, 1901.

Published May 22, 1901.

LEGISLATURE.

Legislative power.

The legislative power is vested in a senate and an assembly.

The number of members of the assembly shall never be less than 54 nor more than 100. The senate shall consist of a number not more than 1-3 nor less than 1-4 of the number of assembly members.

Const., art. 4, sec. 1, p. 78; sec. 2, p. 83.

Election—Qualification.

This art. provides how members shall be chosen and what their qualifications shall be.

Const., art. 4, secs. 4, 5 and 6, pp. 84, 85.

Oaths of members, who may administer.

This sec. provides as to oaths of members, and who may administer the same.

Wis. Stats., sec. 100, p. 231.

Compensation and mileage of members.

Upon the issue of a certificate by the presiding officers of the senate and assembly and countersigned by the chief clerk, showing that such member has taken the official oath and the number of miles traveled by him in going to and from the place

of meeting of the legislature, the amount of mileage and salary to which each member is entitled shall be audited and paid out of the treasury.

Wis. Stats., sec. 110, p. 234.

At the close of each session of the leg. the Secretary of State shall publish in the state official state paper a full list of the accounts audited.

Wis. Stats., sec. 113, p. 236.

This act provides conditions under which the Secretary of State as Auditor may approve vouchers for transportation.

Ch. 426, L. 1901.

Sessions.

The regular session of the legislature shall commence at 12 o'clock on the second Wednesday of January of each odd numbered year, and no oftener unless the Governor shall convene a special session and when so convened no business except as shall be necessary shall be transacted.

Wis. Stats., sec. 99, p. 231.
Const., art. 4, sec. 11, p. 87.
Const., art. 5, sec. 4, p. 96.

Joint committees.

At the commencement of every session of the legislature there shall be appointed by the respective houses two joint standing committees with duties as herein prescribed.

Wis. Stats., sec. 106, p. 233.

Officers.

Each house shall choose its own officers and the senate shall choose a temporary president when the Lieutenant Governor shall not attend as president or shall act as Governor.

Const., art. 4, sec. 9, p. 86.

This act limits the number, prescribes the duties and fixes the compensation of the officials and employees of the legislature.

Ch. 438, L. 1901.

NOTE.—This act is so comprehensive and the provisions of such character that it can not intelligently be condensed to the limit of this pamphlet. For this reason it is considered wise to refer to the act itself for information under this head.

Rules.

Each house may determine the rules of its own proceedings.

Const., art. 4, sec. 8, p. 86.

Immunity of members from arrest; contempt.

No officer of the senate or assembly, while in actual attendance upon the duties of his office, shall be liable to arrest on civil process.

Each house may punish as for a contempt.

Wis. Stats., secs. 101, 102, p. 231.

May confer powers.

The legislature may confer upon the boards of supervisors of the several counties of the state such powers of a local, legislative and administrative character as they shall from time to time prescribe.

Const., art. 4, sec. 22, p. 91.

Municipal corporations.

It shall be the duty of the legislature and they are hereby empowered to provide for the organization of cities and villages and to restrict their power of taxation, assessment, contracting debts and loaning their credit.

Const., art. 11, sec. 3, p. 122.

Legislature may restrict powers.

The legislature may at any time limit or restrict the powers of any corporation organized under any law, and for just cause annul the same and prescribe such mode as may be necessary for the settlement of its affairs.

Wis. Stats., sec. 1768, p. 1275.

Witnesses, how subpoenaed.

All subpoenas issued for the purpose of procuring attendance of witnesses before any committee of the legislature or either house thereof, shall be signed by the presiding officer and chief clerk of the senate or assembly.

Wis. Stats., sec. 122, p. 237.

Inspection of books.

The legislature or any committee thereof may at any time inspect the books, papers or transactions of the Treasurer.

Wis. Stats., secs. 157-5, p. 250.

Removal of judges.

Any judge of the supreme court or circuit court may be removed from office by address of both houses of the legislature if two-thirds of all the members concur therein. But no judge may be removed unless a copy of the charges against him has been served.

Wis. Stats., sec. 13, p. 106.

Stationery.

The legislature shall be supplied with all necessary stationery to be furnished by the Superintendent of Public Property.

Wis. Stats., sec. 114, p. 236.

Blue-book.

The Commissioner of Bureau of Labor and Industrial Statistics shall cause to be printed biennially for the use of the senate and assembly a book denominated the "blue book of Wisconsin," to contain matter as herein provided.

Wis. Stats., sec. 119, p. 236, amended by ch. 405, L. 1901.

Documents, laws.

Each member of the legislature shall receive from the Superintendent of Public Property one copy of the journals of the senate and assembly, of the public documents and one of the laws.

Wis. Stats., sec. 350, p. 320.

Copies of reports of state officers.

There shall be delivered to the legislature which convenes in regular session next after the close of the biennial fiscal term, for the use of the members, the number of copies of the reports of the state officers, boards and departments herein specified.

Wis. Stats., sec. 353, p. 321.

This act provides for submitting to the people a constitutional amendment giving the legislature power to pass general banking law.

Ch. 73, L. 1901.

DISBURSEMENTS ON ACCOUNT OF THE LEGISLATURE.

For the year ending Sept. 30, 1900.

Printing journals and enrolled acts of the Senate and Assembly, including cost of paper and waste per report Commissioners of Printing.....	\$2,237 68
Printing Blue Book photographs	5,331 55
Publishing laws of general interest	200 00
Total	\$7,769 23

Pages 204 and 488 in the report of the Secretary of State for the year ending Sept. 30, 1900.

Note.—During the year ending Sept. 30, 1899, there was a session of the Legislature, and the expense, including publishing laws in newspapers, was \$200,597.01.

GOVERNOR.

Executive power.

In the Governor is vested the executive power of the state.

Const., art. 5, sec. 1, p. 36.

Eligibility.

He must be a citizen of the United States and a qualified elector of this state.

Const., art. 5, sec. 2, p. 36.

Election.

He "shall be elected by the qualified electors of the state at the times and places of choosing members of legislature." He shall be chosen at the general election each even-numbered year and the term shall commence the first Monday of January succeeding.

Const., art. 5, sec. 3, p. 36.
Wis. Stats., sec. 128, p. 129.

Duties as to laws and state business.

He shall see that the laws are faithfully executed, and transact necessary business with officers of the government.

Const., art. 5, sec. 4, p. 36.

State sovereignty and jurisdiction.

He shall defend the sovereignty and jurisdiction of the state as herein provided.

Wis. Stats., sec. 1, p. 136.

Compensation.

His compensation is \$5,000 annually in full for all expenses.

Const., art. 5, sec. 5, p. 37.
Wis. Stats., sec. 179, p. 259.

Contingent fund.

He shall render a statement to the legislature of all payments made from contingent fund appropriated.

Wis. Stats., sec. 137, p. 243.

\$2,000 was appropriated annually for 1901 and 1902 to Governor's contingent fund.

Ch. 32, L. 1901.

Private secretary, executive clerk and other assistants and compensation therefor.

He may appoint a private secretary, who shall have charge of papers, documents and records.

Wis. Stats., sec. 129, p. 240.

He may appoint an executive clerk and fix his salary.

Private secretary's annual salary is \$1,600.

Wis. Stats., sec. 170, p. 229.

NOTE.—The person filling this office is usually appointed military secretary at \$1,200 salary, making total compensation \$2,800 annually.

The Governor may appoint a stenographer and a messenger and such help as he deems necessary in his office and fix compensation therefor.

Wis. Stats., sec. 169b, p. 258, amended by ch. 290, L. 1899, p. 511, amended by ch. 419, L. 1901.

Postage.

He may procure for his office at state expense necessary postage for his official correspondence.

Wis. Stats., sec. 169, p. 258.

Stationery.

He or his private secretary may procure stationery for his office from the Superintendent of Public Property.

Wis. Stats., sec. 290, p. 301.

Executive seal.

The executive privy seal, a written description of which is in the possession of Secretary of State, shall be the seal of the private secretary of Governor, with which all of his official certificates shall be authenticated.

Wis. Stats., sec. 98, p. 220.

This act authorizes him to loan two Wisconsin battle flags to the Gen. Grant Monument Association in New York city.

Ch. 275, L. 1901.

This act makes an appropriation to enable the Governor to re-engage and restore the great and lesser seal.

Ch. 364, L. 1901.

His relation to the legislature.

The Governor shall communicate to the legislature the condition of the state and make recommendations.

Const., art. 5, sec. 10, p. 98.

Wis. Stats., sec. 137, p. 243.

He shall expedite measures resolved upon by the legislature.

He may convene the legislature on extraordinary occasions.

Const., art. 5, sec. 4, p. 96.

In case of resignation of Governor such resignation shall be made to the legislature.

Wis. Stats., sec. 961, p. 763.

Whenever the Governor shall be authorized to make any appointment to office by and with the advice and consent of the senate, and the legislature shall not be in session at the time such office should be filled, he may fill such office and make appointment thereto, subject to the approval of the senate at the next succeeding session of the legislature, and all such appointments shall be as valid and effectual from the time when the same may be so made until twenty days after such meeting of the legislature as if he possessed the absolute power of appointment.

Wis. Stats., sec. 137a, p. 243.

When a vacancy occurs in an elective state office the Governor shall appoint a suitable person to perform duties thereof until vacancy is regularly filled.

Wis. Stats., sec. 965, p. 765.

When a vacancy occurs during recess of legislature in an office where confirmation of senate is necessary, the Governor may, as provided in this section, appoint a suitable person to perform the duties of such office.

Wis. Stats., sec. 966, p. 765.

He shall sign bills from the legislature if approved; if not, return them.

Const., art. 5, sec. 10, p. 98.

He shall notify the proper house where bills originated when acts of the legislature become laws.

Wis. Stats., sec. 120, p. 240.

He shall deposit with the Secretary of State the acts and resolutions of the legislature that become laws.

Wis. Stats., sec. 120, p. 240.

He shall transmit to the legislature the Normal School Regents' reports.

Wis. Stats., sec. 410, p. 341.

Two thousand copies of his message to the legislature shall be printed.

Wis. Stats., sec. 335c, p. 314.

He may have 125 copies of the Blue Book.

Wis. Stats., sec. 121, p. 236.

He shall report biennially to the legislature the condition of the state institutions.

Wis. Stats., sec. 137, p. 243.

He shall appoint a legislative visiting committee for institutions under the Board of Control before Dec. 1 after each general election, one from the senate elect and one from the assembly elect.

Wis. Stats., sec. 562b, p. 414.

He shall appoint three members of the legislature to confer with the legislature of Minnesota in regard to taxation.

Ch. 8, L. 1901.

Rewards.

He may offer rewards, not exceeding \$500, for the apprehension and delivery of persons committing crimes and shall certify his determination as to the same as herein provided.

Wis. Stats., sec. 132, p. 241.

Notaries Public.

He shall appoint for each county one or more notaries public, qualified electors or females 21 years old or over, for a term of four years as herein provided.

Wis. Stats., sec. 173, p. 263.

Each applicant for notary public shall give a bond of \$500 to the Governor as herein provided.

Wis. Stats., sec. 174, p. 264.

Commissioners of deeds.

The Governor may appoint one or more commissioners of deeds for Wisconsin in other states; term four years, unless sooner removed.

Wis. Stats., sec. 182, p. 267.

Pardons.

He may grant pardons, and communicate to the legislature each case of pardon granted, with reasons.

Const., art. 5, sec. 6, p. 97; sec. 4, p. 96.

He may make rules governing applications for pardons. Each application shall be accompanied by papers provided for by sec. 4857. See pages 2868, 2669, 2870, of Wis. Stats.

Wis. Stats., sec. 4861, p. 2867.

Fees and expenses of proceeding to determine whether conditional pardons have been violated, must be approved by the Governor before being paid.

Wis. Stats., sec. 4863, p. 2870.

Lands.

He may convey lands that may be required by the United States government, as herein provided.

Wis. Stats., sec. 2, p. 136.

He may convey lands to the United States for lighthouse purposes.

Wis. Stats., sec. 3, p. 137.

He may receive from the United States the 5% net proceeds of sales of Wisconsin lands as approved by act of congress of Aug. 6, 1846, and execute proper vouchers therefor.

Wis. Stats., sec. 133, p. 243.

He may issue land patents, and duplicate patents when originals are lost.

Wis. Stats., sec. 135, p. 242.

Land patents issued by the Governor are to be deposited with the Secretary of State.

Wis. Stats., sec. 135, p. 242.

Swamp-land and war-claim matters.

He is authorized hereby to do, or procure done, whatever he thinks necessary as to swamp-land and war-claim matters with the United States.

Chaps. 269, 296, L. 1899, pp. 457, 518.

Elections.

He shall procure presidential election returns as herein provided.

Wis. Stats., sec. 94c, p. 218.

It is his duty to certify election of United States senator to president United States senate.

Wis. Stats., secs. 94v, 94an, pp. 226, 227.

He shall issue writs of election to fill vacancies in either house of legislature.

Const., art. 5, sec. 14, p. 88.

He may direct special elections as herein provided.

Wis. Stats., sec. 94m, p. 222.

Patents to railroads.

He shall sign patents to railroad companies in connection with the Secretary of State, under conditions provided for in this section.

Wis. Stats., sec. 1820, p. 1342.

He may issue new patent to railway corporation, giving the execution and delivery of preceding patent.

Wis. Stats., sec. 135a, p. 242.

Public institutions.

He is authorized to visit and inspect public institutions supported wholly or in part by state appropriations.

Wis. Stats., sec. 136, p. 243.

Approval of bonds.

To approve the amount of bond of corporations conducting private asylums receiving non-resident patients.

Wis. Stats., sec. 1786a, p. 1307.

He may approve of state building contractors' bonds as herein provided.

Chaps. 292, 296, L. 1899, pp. 515, 519.

Reports of officers and boards.

He shall receive annual reports of officers and heads of state departments, unless otherwise provided by law.

Wis. Stats., sec. 333, p. 313.

Military commission.

He may furnish a duplicate military commission to any officer of the Wisconsin regiments, upon satisfactory evidence of loss of original.

Wis. Stats., sec. 134a, p. 242.

Demanding fugitives.

He may demand fugitives from justice from other states. See also sec. 4844, page 2885, and sec. 4845, page 2889.

Wis. Stats., sec. 4843, p. 2863.

Warrants.

He may issue warrants on demands of other states. See sec. 4848, page 2866.

Wis. Stats., sec. 4847, p. 2866.

Arbor and Labor days.

He may designate Arbor, Bird and Labor days.

Wis. Stats., sec. 137b, p. 243.

Examining unused property.

He, with the Secretary of State and State Treasurer, shall examine any chattel property not in use and direct sale thereof as herein provided.

Wis. Stats., sec. 294, p. 302.

All state officers, heads of departments, chiefs of bureaus and boards, shall on or before January 10 each odd-numbered year deliver to the Governor a concise and detailed report of all receipts and expenditures of their office, department or board for the biennial term ending the first Monday in January, and shall make a detailed statement for the corresponding years of the two preceding terms.

Ch. 97, L. 1901.

HIS RELATION TO THE SECRETARY OF STATE.

Employing counsel.

He may, in connection with the Secretary of State, employ counsel to assist the Attorney General, and fix the compensation therefor.

Wis. Stats., sec. 131, p. 241.

Apportioning funds.

He may, in connection with the Secretary of State and State Treasurer, apportion funds in the treasury.

Wis. Stats., sec. 1069n, p. 827.

Transferring funds.

His consent is necessary to the transferring of trust funds to the general fund of the Secretary of State, State Treasurer and Attorney General.

Ch. 147, L. 1899, p. 217.

Executing certificates of indebtedness.

He shall, in connection with the Secretary of State and State Treasurer, execute a certificate of indebtedness whenever commissioners of public lands purchase state bonds, as herein provided.

Wis. Stats., sec. 259, p. 294.

HIS RELATION TO THE STATE TREASURER.

Proceeds, sales of land.

He shall pay into the state treasury moneys received from the United States, being 5% of the proceeds of public lands, for the benefit of the school fund.

Wis. Stats., sec. 133, p. 242.

Treasurer's reports.

He shall receive the report of the Treasurer quarterly or oftener if required, pertaining to the duties of the office and any information he shall require.

Wis. Stats., secs. 157-7, p. 251.

This act provides for an additional report to the Governor to be made before January 10 each odd-numbered year.

Ch. 97, L. 1901.

He shall receive from the Treasurer a full and detailed report of all moneys received and paid out during the preceding fiscal term within 10 days after September 30 each even-numbered year.

Wis. Stats., secs. 157-8, p. 251.

Examining treasury.

He, with the Attorney General, shall once each quarter examine the books of the State Treasurer and see that all moneys are in the vaults of the treasury or in the several state depositories. In case of a deficiency he shall require the Treasurer to make it up. (See sec. 157-5, page 250, of Wis. Stats., 1898.)

Wis. Stats., sec. 159, p. 252.

Treasurer's bond.

He shall approve of the bond of the Treasurer which bond shall be \$100,000.00, and shall be filed in executive office.

Wis. Stats., sec. 153, p. 249.

He may require an additional bond of the Treasurer not exceeding the funds in the treasury.

Wis. Stats., sec. 154, p. 249.

HIS RELATION TO THE ATTORNEY GENERAL.

Actions and proceedings.

He may instruct the Attorney General to appear for the state and prosecute or defend actions and proceedings.

Wis. Stats., sec. 163-1, p. 255.

He may direct the Attorney General to appear and prosecute actions against banks as herein provided.

Wis. Stats., sec. 3220, p. 2214.

May require examinations.

He may require the Attorney General to examine corporations as herein provided.

Wis. Stats., sec. 1766, p. 1275.

Bond.

The Attorney General's bond shall be in the sum of \$10,000.00 and subject to the Governor's approval.

Wis. Stats., sec. 161, p. 254.

HIS RELATION TO THE INSURANCE COMMISSIONER.

Must examine books and records.

He shall, in connection with the Secretary of State and State Treasurer examine and audit quarterly the books and records of the insurance department.

Wis. Stats., sec. 1972c, p. 1487.

Reports.

He shall receive the annual report made by the Insurance Commissioner, to cover the general conduct and condition of companies doing business in this state arranged in tabular form or in abstracts, in classes, according to different kinds of insurance.

Wis. Stats., sec. 1972b, p. 1486.

This act provides for an additional report to be made to the Governor before January 10 each odd-numbered year.

Ch. 97, L. 1901.

On the first day of each month, he shall receive a detailed report of the receipts during the preceding month from the Insurance Commissioner.

Wis. Stats., sec. 1972c, p. 1487.

Bond.

The bond of the Insurance Commissioner, which shall be \$20,000.00, is subject to the Governor's approval.

Wis. Stats., sec. 1967, p. 1483.

HIS RELATION TO THE RAILROAD COMMISSIONER.

Report.

On or before the first Monday in December, each odd-numbered year, he shall receive the report of the Railroad Commissioner.

Wis. Stats., sec. 1795, p. 1222.

This act provides for an additional report to be made to the Governor before January 10 each odd-numbered year.

Ch. 97, 1901.

Bond.

Bond of Railroad Commissioner to be approved by Governor.

Wis. Stats., sec. 1793, p. 321.

HIS RELATION TO THE STATE SUPERINTENDENT.

Report.

He shall receive the report of the State Superintendent, including in his report an account of all dictionaries sold, on or before the 10th day of December, each even-numbered year.

Wis. Stats., secs. 166-8, p. 257.

This act provides for an additional report to be made to the Governor each odd-numbered year.

Ch. 97, L. 1901.

HIS RELATION TO THE DAIRY AND FOOD COMMISSIONER.

Appointments.

He shall, by the consent and advice of the senate, appoint a Dairy and Food Commissioner for a term of two years.

Wis. Stats., sec. 1410, p. 1058.

His approval is necessary before the Dairy and Food Commissioner may appoint an assistant, a chemist, an agent and a special counsel.

Wis. Stats., sec. 1410, p. 1058.

Farm Institutes.

He may authorize the Dairy and Food Commissioner to assist at "farm institutes."

Wis. Stats., sec. 1410d, p. 1060.

Report.

He shall receive the report of the Dairy and Food Commissioner after Sept. 30, each even-numbered year.

Wis. Stats., sec. 1410, p. 1058.

This act provides for an additional report to be made to the Governor before Jan. 10, each odd-numbered year.

Ch. 97, L. 1901.

Approval of accounts.

His approval is required of the accounts for making analysis (for which \$600 is provided) of dairy and food products.

Wis. Stats., sec. 1410c, p. 1060.

HIS RELATION TO THE SUPERINTENDENT OF PUBLIC PROPERTY.

Appointment.

He shall appoint a suitable person as Superintendent of Public Property for a term of two years, term commencing at same time as elective state offices, until his successor qualifies, unless sooner removed by the Governor.

Wis. Stats., sec. 236, p. 299.

Report.

He shall receive the annual (Sept. 30) report of the Superintendent of Public Property in detail pertaining to the duties of his office.

Wis. Stats., sec. 291, p. 301.

This act provides for an additional report to be made to the Governor before Jan. 10, each odd-numbered year.

Ch. 97, L. 1901.

Bond.

His approval is required of the bond, which shall be for \$15,000.00, of the Superintendent of Public Property, and said bond shall be preserved in the executive office.

Wis. Stats., sec. 236, p. 299.

Improvements.

His advice and consent is required before the improvements herein provided for may be made by the Superintendent of Public Property.

Wis. Stats., sec. 288, p. 300.

His advice is necessary where appointments are made under this section.

Claims and accounts.

His approval is required on all claims for freight, labor or purchases, except stationery, properly certified to by the Superintendent of Public Property.

Wis. Stats., sec. 293, p. 302.

"Additional help."

His approval is required in case of additional help and compensation therefor appointed and fixed by the Superintendent of Public Property. Limited to \$6,000 in any one year, as herein provided.

Ch. 29d, L. 1899, amended by ch. 419, L. 1901.

This act authorizes the Governor to put a new ventilation plant in the capitol at a cost not to exceed \$25,000.

Ch. 359, L. 1901.

HIS RELATION TO THE BANK EXAMINER.

Appointment and bond.

He shall approve of the appointment and bond of Bank Examiner.

Bond shall be \$25,000.00.

Wis. Stats., sec. 2023h, p. 1522.

Clerk and stenographer.

He shall approve of appointment of chief clerk and stenographer by the Bank Examiner.

Wis. Stats., sec. 2023k, p. 1522.

Report.

He shall receive annual report of Bank Examiner on the second Monday in December.

Wis. Stats., sec. 2023r, p. 1524.

This act provides for an additional report to be made to the Governor before Jan. 10, each odd-numbered year.

Ch. 97, L. 1901.

HIS RELATION TO THE COMMISSIONER OF LABOR STATISTICS.

Appointment.

He shall, with consent of Senate, appoint a Commissioner of Labor Statistics for a term of two years, from the first Monday in February in year appointed.

Wis. Stats., sec. 1021c, p. 732.

Report.

He shall receive report of Commissioner of Labor Statistics within ten days after the expiration of the biennial fiscal term.

Wis. Stats., sec. 1021k, p. 735.

This act provides for an additional report to be made to the Governor before Jan. 10, each odd-numbered year.

Ch. 97, L. 1901.

HIS RELATION TO THE FISH AND GAME WARDEN.

Appointment.

He may appoint a Fish and Game Warden for a term of two years from date of appointment and until his successor qualifies.

Wis. Stats., sec. 1498, p. 1110.

Approving appointments and expenses of deputies.

His approval is required in case of appointment of thirty special deputies made by the Fish and Game Warden, and the fixed compensation therefor; their expenses to be paid on vouchers subject to his approval.

Wis. Stats., sec. 1498a, p. 1110, amended by ch. 312, L. 1899.

Report.

He shall receive annual report of the Fish and Game Warden.

Wis. Stats., sec. 1493 l, p. 1113.

This act provides for an additional report to be made to the Governor before Jan. 10, each odd-numbered year.

Ch. 97, L. 1901.

HIS RELATION TO THE STATE TREASURY AGENT.

Appointment.

He shall appoint a State Treasury Agent, who shall hold his office during the governor's pleasure.

Wis. Stats., sec. 1578, p. 1158.

Bond.

His approval is required of bond of Treasury Agent, which bond shall be \$5,000 with sufficient sureties.

Wis. Stats., sec. 1578, p. 1158.

Report.

At the end of each fiscal year, he shall receive the report of the Treasury Agent, including therein a statement of all moneys received and disbursed by him and any other information required.

Wis. Stats., sec. 1579, p. 1159.

This act provides for an additional report to be made to the Governor before January 10, each odd-numbered year.

Ch. 97, L. 1901.

HIS RELATION TO THE COMMISSIONERS OF PUBLIC LANDS.

Report.

Within 10 days after September 30th, of each even-numbered year, he shall receive the biennial report made by the Commissioners of Public Lands.

Wis. Stats., sec. 191, p. 270.

This act provides for an additional report to be made to the Governor before January 10, each odd-numbered year.

Ch. 97, L. 1901.

Approving investments.

His approval is required in case of investment of funds in bonds of the state or of the U. S. directed by the Commissioner of Public Lands.

Wis. Stats., sec. 160, p. 252.

Inter-state Park Commissioners.

This act empowers the Governor to carry on the work of acquiring the lands for an Inter-State Park. Governor shall appoint a commission of three persons to carry out the provisions of this act.

Ch. 305, L. 1901.

HIS RELATION TO THE COMMISSIONERS OF PUBLIC PRINTING.

Reports to be transmitted to him.

He shall transmit the reports of the state officers and boards, or copies thereof, to the Commissioners of Public Printing.

Wis. Stats., sec. 333, p. 313.

Report of Commissioners.

He shall receive biennial report of Commissioners of Public Printing, wherein shall be set forth the cost of public printing during the preceding fiscal year, with their recommendations as to any retrenchment that may be made.

Wis. Stats., sec. 335, p. 313.

This act provides for an additional report to be made to the Governor before January 10 each odd-numbered year.

Ch. 97, L. 1901.

HIS RELATION TO THE TAX COMMISSIONER AND ASSISTANTS.

Appointments.

He shall nominate, and by and with the consent of the Senate, appoint a Commissioner of Taxation with a first and second assistant, to serve for a term of 10 years from May 1, 1899.

Ch. 206, L. 1899,
Wis. Stats., sec. 1, p. 341.

HIS RELATION TO THE COMMISSIONERS OF FISHERIES.

Appointments.

He shall, with the consent of the Senate, appoint six members of the Board of Commissioners of Fisheries, for a term of six years. He shall be a member of and President of the Board.

Wis. Stats., sec. 1496, p. 1108.

HIS RELATION TO THE STATE BOARD OF CONTROL.

Appointments.

He shall appoint five members of the Board of control, with the consent of the senate, no two of which at the time of their appointment shall be residents of the same congressional district, and not all of whom shall belong to the same political party.

Wis. Stats., sec. 561a, d, pp. 406-7.

Hospital districts, Governor to act with Board of Control.

He and the Board of Control shall constitute a board to divide the state into hospital districts.

Wis. Stats., sec. 581, p. 427.

Approving acts and contracts.

He shall approve of contract made by the Board of Control for the support of insane convicts in the Milwaukee Hospital for the Insane.

Wis. Stats., sec. 417, p. 444.

His approval is necessary in case of removal of insane convicts from state prison to Milwaukee County Insane Hospital.

Wis. Stats., sec. 561jj, p. 411; sec. 4944, p. 2385.

He may discharge reformatory inmates without procedure upon recommendation of the Superintendent of the Reformatory and the Board of Control.

Wis. Stats., sec. 4944k, p. 2888.

His approval is necessary in order to effectuate transfers to Wisconsin Reformatory.

Ch. 28, L. 1899.

His consent in writing is necessary to enable the Board of Control to create indebtedness to establish manufacturing business or when appropriation is insufficient or great emergency exists.

Wis. Stats., sec. 5611, p. 409; sec. 563, p. 414.

Reports.

He shall receive biennially the report of the Board of Control in regard to the institutions under their care, on or before Dec. 1, in even-numbered years.

Wis. Stats., sec. 561d, p. 407.

This act provides for an additional report to be made to the Governor before Jan. 10, each odd-numbered year.

Ch. 97, L. 1901.

He shall receive twice a year the report of the Board of Control regarding the Veterans' Home.

Wis. Stats., sec. 567, p. 416.

Provides for an additional report to be made to the Governor.

Ch. 97, L. 1901.

This act authorizes the Board of Control, with the approval of the Governor, to purchase land for reformatory not to exceed \$150 per acre.

Ch. 289, L. 1901.

HIS RELATION TO AGENT TO INVESTIGATE STATE INSTITUTIONS OR EMPLOYEES THEREOF.

Appointment and report.

He may appoint an agent, male or female, to make investigations of state institutions or employes thereof, who shall make a written report thereof; the appointee shall be a suitable person, male or female, whose compensation shall be \$6.50 per day for each day actually and necessarily required in performing duties, and be reimbursed for all expenses thereby incurred.

Wis. Stats., sec. 562a, p. 413, amended by ch. 403, L. 1901.

This act provides for an additional report to be made to the Governor before Jan. 10, each odd-numbered year.

Ch. 97, L. 1901.

HIS RELATION TO COMMITTEE FOR VISITING STATE INSTITUTIONS.

He shall appoint a visiting committee for state institutions before December 1, after each general election, one from the senate elect and one from the assembly elect.

Wis. Stats., 562b, p. 414.

HIS RELATION TO THE STATE BOARD OF AGRICULTURE.

Appointments.

He may appoint members of the State Board of Agriculture, one from each congressional district, two at large, for a term of three years, only two-thirds of the members to be from the same political party.

Wis. Stats., sec. 1456, p. 1087.

Report.

He shall receive the report of the Board of Agriculture on or before Dec. 1, each even-numbered year.

Wis. Stats., sec. 1453a, p. 1088.

This act provides for an additional report to be made to the Governor before Jan. 10, each odd-numbered year.

Ch. 97, L. 1901.

Assigning rooms in capitol.

He may assign rooms in the capitol to the Board of Agriculture.

Wis. Stats., sec. 1453a, p. 1088.

HIS RELATION TO THE WISCONSIN NATIONAL GUARD.

Commander-in-Chief.

He shall be commander-in-chief of the military forces of the state.

Const., art. V, sec. 4, p. 96.

Appointments.

He may appoint on his staff an adjutant general, quartermaster general and surgeon general, one inspector of small arms practice, five aides-de-camp, two paymasters, one commissary of subsistence, and such other officers as he may require.

He may fix pay of staff officers for special services.

He may appoint in connection with that officer assistants and clerks for the adjutant general.

Ch. 228, L. 1901.

NOTE.—For the details of the powers and duties of the Governor in connection with the Wisconsin National Guard, Ch. 228 of the laws of 1901 should be consulted.

Military reservation.

He may purchase property not exceeding \$1,000 for addition to Wisconsin Military Reservation.

Ch. 178, L. 1899.

This act authorizes the appointment by the Governor of a commission of three or more to ascertain the position of the Wisconsin troops in the campaign and siege of Vicksburg, the necessary traveling expenses to be paid out of the \$1,000 appropriated by this act.

Ch. 281, L. 1901.

The said commission shall report to the Governor on or before Jan. 15, 1902.

Provides for an additional report to be made to the Governor.

Ch. 97, L. 1901.

HIS RELATION TO THE BOARD OF REGENTS OF U. W.

Appointments.

He shall appoint members of Board of Regents of U. W. for a term of three years from the first Monday of February of the year appointed unless sooner removed. One member from each congressional district and two from state at large.

Wis. Stats., sec. 378, p. 330.

Report.

He shall receive, at the close of each biennial fiscal term, a detailed report of the Board of Regents through their president and he shall direct the number of reports to be printed.

Wis. Stats., sec. 383, p. 331.

This act provides for an additional report to be made to the Governor.

Ch. 97, L. 1901.

HIS RELATION TO THE BOARD OF REGENTS OF THE NORMAL SCHOOLS.

Appointments.

He shall appoint ten members of the Board of Regents of Normal Schools for a term of five years, commencing the first Monday in February of year appointed. Members are divided into five classes so that the term of two regents shall expire each year. Not more than one member shall reside in the same congressional district; provided that there are two normal schools in the same district, there may be two regents in said district. He shall fill vacancies for residue of term only.

Wis. Stats., sec. 333, p. 336, amended by ch. 74, L. 1899.

Transferring trust funds.

His approval is necessary to transfer trust funds to the Normal School fund.

Ch. 202, L. 1899, p. 336.

Report.

On Aug. 31 of the year the biennial term closes, he shall receive the report of the Board of Regents of the Normal Schools.

Wis. Stats., sec. 410, p. 341.

Provides for an additional report.

Ch. 97, L. 1901.

HIS RELATION TO THE SUPERVISOR OF INSPECTORS OF ILLUMINATING OILS.

Appointment.

He shall appoint, with the advice and consent of the senate, a person as supervisor of inspectors of illuminating oils, who shall not be interested financially in the manufacture, refining or sale of oil, and who shall receive \$1,500 annually. His approval is necessary in case of appointment of deputy inspectors and shall define their duties. He shall fix their salary which, with actual and necessary traveling expenses, shall not exceed 8 cents per barrel for number of barrels of oil inspected during the month. Salary and expenses shall be paid out of special fund subject to the approval of the Governor. He may appoint three persons to act without compensation to decide and determine the illuminating qualities of oil.

Wis. Stats., sec. 1421a, p. 1068.

Ch. 466, L. 1901.

Report.

He shall receive the report of the supervisor on the first of October of each even-numbered year.

Wis. Stats., sec. 1421c, p. 1068.

Provides for an additional report to be made to the Governor.

Ch. 97, L. 1901.

HIS RELATION TO THE STATE VETERINARIAN.

Appointment.

He shall appoint a competent veterinary surgeon to be state veterinarian for a term of two years.

Wis. Stats., sec. 1492a, p. 1101.

Approving accounts.

With his consent and approval the state veterinarian shall be allowed, for experimental purposes, a sum not exceeding \$500 annually, which shall be audited upon verified accounts and itemized statement as herein provided.

He shall receive biennially the report of such officer.

Wis. Stats., sec. 1492e, p. 1103.

His approval is required in case of veterinary surgeons called into consultation by the state veterinarian, and said surgeons shall be paid \$7 per day and necessary expenses.

Wis. Stats., sec. 1492e, p. 1103.

Proclamation as to animal diseases.

He shall issue a proclamation upon receipt of notice of disease among animals.

Wis. Stats., sec. 1492c, p. 1103.

HIS RELATION TO THE STATE INSPECTOR OF APIARIES.

Appointment.

He may appoint a state inspector of apiaries for a term of two years and said inspector shall report to him at the close of each calendar year.

Wis. Stats., sec. 1494f, p. 1107.

HIS RELATION TO THE LUMBER INSPECTORS.

Appointment.

He may appoint, for a term of two years, lumber inspectors, one for each lumber district. Each inspector is to be a citizen of the state and reside in the district to which appointed.

Wis. Stats., sec. 1731, p. 1252.

HIS RELATION TO THE GEOLOGICAL AND NATURAL HISTORY SURVEY.

Member of.

He is to be a member of the board of commissioners to govern the geological and natural history survey.

Chaps. 297, 163, L. 1899, pp. 637, 238.

HIS RELATION TO THE STATE HISTORICAL SOCIETY.

Member executive committee.

He, in connection with the Secretary of State and State Treasurer, shall be ex-officio member of the executive committee of the State Historical Society and take care that the interests of the state are protected, as is herein provided.

Wisconsin Stats., sec. 374, p. 327.

Report.

He shall receive an annual report from the State Historical Society.

Wis. Stats., sec. 376, p. 327.

This act provides for an additional report to be made to the Governor before Jan. 10, each odd-numbered year.

Ch. 97, L. 1901.

HIS RELATION TO THE STATE BOARD OF MEDICAL EXAMINERS.

Appointment.

He shall appoint from lists furnished by three medical societies a State Board of Medical Examiners, which board shall consist of seven members. Three of the members shall be allopathic, two homeopathic and two eclectic, and their term shall be four years.

Wis. Stats., sec. 1435, p. 1075.

Report.

At the end of each biennial term he shall receive the report of the State Board of Medical Examiners.

Ch. 87, L. 1899, p. 122.

This act provides for an additional report to be made to the Governor each odd-numbered year before Jan. 10.

Ch. 97, L. 1901.

HIS RELATION TO THE STATE BOARD OF DENTAL EXAMINERS.

Appointment.

He shall appoint, for a term of five years, a State Board of Dental Examiners, consisting of five dentists, three of whom shall be members of the Wisconsin Dental Society, as herein provided.

Wis. Stat., sec. 1410e, p. 1061.

Report.

He shall receive the report of the Board of Dental Examiners annually on the 30th of September. Report shall contain an account of receipts and disbursements.

Wis. Stat., sec. 1410j, p. 1062.

This act provides for an additional report to be made to the Governor before Jan. 10, each odd-numbered year.

Ch. 97, L. 1901.

HIS RELATION TO THE STATE BOARD OF HEALTH.

Appointments.

He shall appoint seven members of the State Board of Health, subject to the approval of the senate, for terms of seven years, beginning the first Monday in February in the year appointed, so that the term of office of one member shall expire each year. Vacancies shall be filled for residue of term only.

Wis. Stat., sec. 1404, p. 1062.

Advice necessary as to expenditures from contingent fund.

He shall advise as to the expenditure of the contingent fund of the Board of Health.

Ch. 24, L. 1899, p. 29.

Report.

He shall receive biennially the report of the State Board of Health.

Wis. Stat., sec. 1407, p. 1053

This act provides for an additional report to be made to the Governor before Jan. 10, each odd-numbered year.

Ch. 97, L. 1901.

HIS RELATION TO THE BOARD OF PHARMACY.

Appointments.

He shall appoint five members of the State Board of Pharmacy for a term of five years, who shall be resident pharmacists. Vacan-

cies shall be filled for unexpired term only and by persons previously elected and certified by the Wisconsin Pharmacy association.

Wis. Stats., sec. 1409b, p. 1055.

Report.

He shall receive the annual report of the Board of Pharmacy.

Wis. Stats., sec. 1409c, p. 1055.

This act provides for an additional report to be made to the Governor before January 10, each odd-numbered year.

Ch. 97, L. 1901.

HIS RELATION TO THE STATE HORTICULTURAL SOCIETY.

Report.

In October of each even-numbered year, he shall receive an itemized account of all money expended from the State Horticultural society.

Wis. Stats., sec. 1459a, p. 1089.

An additional report is provided by this act to be made to the Governor before January 10, each odd-numbered year.

Ch. 97, L. 1901.

HIS RELATION TO THE BOARD OF ARBITRATION.

Appointments.

He shall appoint two members of the State Board of Arbitration & Council, one to be an employer of labor and the other not.

Wis. Stats., sec. 1729b, p. 1248.

Report.

At the end of each biennial term, he shall receive the report of the Board of Arbitration.

Wis. Stats., sec. 1721i, p. 1244.

An additional report is provided by this act to be made to the Governor before January 10, each odd-numbered year.

Ch. 97, L. 1901.

HIS RELATION TO INTERSTATE PARK COMMISSION.

Appointment of Commissioners.

He may appoint three interstate park Commissioners to serve two years.

Ch. 305, L. 1901. (See ch. 315, L. 1895, and ch. 102, L. 1899.)

HIS RELATION TO THE COMMISSIONERS ON UNIFORMITY OF LEGISLATION.

Appointments.

He may appoint for a term of three years a Board of Commissioners on Uniformity of Legislation consisting of three members, who shall report to him before time for meeting of legislature.

Wis. Stats., sec. 127a, p. 239.

HIS RELATION TO THE MILWAUKEE HOSPITALS FOR INSANE.

Appointments.

He may appoint the Board of Trustees of Milwaukee Hospital for Insane, consisting of seven members, for a term of seven years.

Wis. Stats., sec. 604s, p. 444, amended by ch. 150, L. 1899.

He shall appoint a Board of Trustees of any county asylum in county of over 200,000 inhabitants, and said board shall consist of two trustees for a term of five years.

Ch. 263, L. 1899, p. 434.

HIS RELATION TO WISCONSIN INDUSTRIAL SCHOOLS FOR GIRLS.

Plans for improvements—Reports.

He and the Secretary of State shall approve of the plans for improvements to be made to the Wisconsin Industrial Schools for Girls.

He shall receive the next annual and biennial reports, containing accounts of moneys expended.

Ch. 33, L. 1899, p. 49.

HIS RELATION TO THE PAN-AMERICAN EXPOSITION.

Appointments—Approval of acts.

He shall appoint five members of the State Board of Commissioners of Managers for the Pan-American Exposition. He shall approve of bond of Treasurer of Board. He shall endorse his approval on estimate of money to be drawn, before payment.

Ch. 318, L. 1899, p. 585.

HIS RELATION TO THE ST. LOUIS WORLD'S FAIR.

This act provides for a State Board Commission at St. Louis World's Fair to be appointed by the Governor. No compensation is provided but their actual expenses for transportation and subsistence when necessarily absent from their homes shall be paid from the appropriation herein provided.

Ch. 297, L. of 1901.

He may appoint a commission of five to select and erect a monument at Shiloh, Tenn. No compensation shall be received but necessary expenses to be paid out of the \$10,000.00 hereby appropriated.

Ch. 381, L. of 1901.

MISCELLANEOUS.

He may appoint county judges for balance of term only, where vacancies occur.

Wis. Stats., sec. 2441, p. 1757, amended by ch. 7, L. 1899.

He may remove county officers, except judicial, after giving them a hearing and a copy of the charges against them.

Const., art. 6, sec. 4, p. 100.

He may remove county officers as herein provided.

He may remove receivers of public money when duty is neglected, except those officers where the law makes other provision for removal.

Wis. Stats., sec. 968, p. 765; sec. 969, p. 766.

He shall issue proclamation on change of county seat.

Wis. Stats., sec. 655, p. 465.

He shall direct District Attorneys to prosecute for failure to report criminal convictions as herein provided.

Wis. Stats., sec. 1021, p. 782.

He may fill vacancy when it occurs in Milwaukee District Court Judgeship.

Ch. 218, L. 1899, p. 358.

He may appoint first Judge of second municipal court of Bayfield county and fill vacancies.

Ch. 286, L. 1899, sec. 12, p. 495.

He may appoint judges of supreme and circuit courts when a vacancy shall occur.

Const., art. 7, sec. 9, p. 107.

HE IS A MEMBER OF THE FOLLOWING BOARDS:

Board of Deposits.

Wis. Stats., sec. 160a, p. 253.

Board to examine unused state chattel property and direct its disposition.

Wis. Stats., sec. 294, p. 302.

Ex-officio member of State Historical Society.

Wis. Stats., sec. 374, p. 327.

Board to divide state, by counties, into hospital districts.

Wis. Stats., sec. 581, p. 427.

Board of Commissioners of Fisheries.

Wis. Stats., sec. 1495, p. 1108.

Board to hear and try complaints against railroads.

Ch. 225, L. 1899, p. 376.

State Board of Immigration.

Ch. 279, L. 1899, p. 483.

Commission of Nelson Dewey Monument.

Ch. 93, L. 1899, p. 130.

Commission to adjust the claim of Robert S. Houston.

Ch. 174, L. 1899, p. 255.

WHAT THE STATUTES PROVIDE SHALL BE FILED IN THE EXECUTIVE OFFICE.

Election returns by County Clerk.

Wis. Stats., sec. 87, p. 215.

All patents, statements of lists of lands or certified copies thereof.

Wis. Stats., sec. 129, p. 240.

Satisfactory evidence of loss of original military commission before new one can be issued.

Wis. Stats., sec. 131a, p. 212.

Oath and bond of Secretary of State.

Wis. Stats., sec. 138, p. 243.

Patents, land statements, &c., as herein provided.

Wis. Stats., sec. 141, p. 244.

Biennial report of the Secretary of State.

Wis. Stats., secs. 141-4, p. 244.

Biennial, annual and quarterly reports of the Auditor.

Wis. Stats., secs. 144-5, pp. 13, 246.

Oath and bond of the State Treasurer.

Wis. Stats., sec. 153, p. 249.

Annual and quarterly report of the State Treasurer.

Wis. Stats., secs. 157-7, p. 250; secs. 161-8, p. 254.

Biennial report of the State Superintendent.

Wis. Stats., secs. 166 8, p. 256.

Reports from retiring state officers of transactions from September 30, to date of retirement.

Wis. Stats., sec. 168, p. 258.

Biennial report of Commissioners of Public Lands.

Wis. Stats., sec. 191, p. 270.

Oath and bond of the Superintendent of Public Property, and annual report.

Wis. Stats., sec. 286, p. 299; sec. 295, p. 302.

Annual reports of officers and heads of departments, unless otherwise provided by law.

Wis. Stats., sec. 333, p. 313.

Biennial report of Commissioners of Public Printing.

Wis. Stats., sec. 335, p. 313.

Annual report of Free Library Commission.

Wis. Stats., sec. 373a, p. 326.

Annual report of Executive Committee of State Historical Society.

Wis. Stats., sec. 376, p. 327.

Biennial report of Regents of U. W.

Wis. Stats., sec. 383, p. 331.

Biennial report of Regents of Normal Schools.

Wis. Stats., sec. 410, p. 341.

Biennial report of Board of Control as to State Institutions.

Wis. Stats., sec. 561d, p. 371.

Written report of Agent appointed to investigate State Institutions.

Wis. Stats., sec. 562a, p. 373.

Report of Legislative Visiting Committee.

Wis. Stats., sec. 562b, p. 274.

Semi-annual report of Board of Control as to Veterans' Home.

Wis. Stats., sec. 567, p. 376.

Bonds of persons who make charges against officers.

Wis. Stats., sec. 968, p. 765.

Annual report of court clerks as to criminal convictions.

Wis. Stats., sec. 1020, p. 781.

Biennial report of Commissioner of Labor Statistics.

Wis. Stats., p. 1021k, p. 785.

Statement of the Secretary of State as to additional tax provided by chapter 48, W. S.

Wis. Stats., sec. 1072, p. 827.

Biennial report of Board of Health and Vital Statistics.

Wis. Stats., sec. 1407, p. 1053.

Annual report of the Board of Pharmacy.

Wis. Stats., sec. 1409c, p. 1055.

Biennial report of the Dairy and Food Commissioner.

Wis. Stats., sec. 1410, p. 1058.

Annual report of the State Board of Dental Examiners.

Wis. Stats., sec. 1410j, p. 1062.

Biennial report of the Supervisor of Inspectors of Illuminating Oils.

Wis. Stats., sec. 1421c, p. 1068.

Biennial report of the State Board of Agriculture.

Wis. Stats., sec. 1458a, p. 1083.

Biennial report of the State Horticultural Society.

Wis. Stats., sec. 1459a, p. 1089.

Annual report of the Secretary of Cranberry Growers' Association.

Wis. Stats., sec. 1479a, p. 1096.

Biennial report of the State Veterinarian.

Wis. Stats., sec. 1492e, p. 1103.

Annual report of the Inspector of Apiaries.

Wis. Stats., sec. 1494, p. 1105.

Annual report of the Fish and Game Warden.

Wis. Stats., sec. 1498 l, p. 1113, amended by ch. 312, L. 1890.

Annual report of the State Treasury Agent.

Wis. Stats., sec. 1579, p. 1158.

Annual report of the Forest Warden.

Wis. Stats., sec. 1636d, p. 1186.

**Biennial report of State Board of Arbitration and Conciliation.
and oaths of the members.**

Wis. Stats., sec. 1721i, p. 1244; sec. 1729b, p. 1248.

Annual report of the Commissioner of Insurance.**Monthly report of Commissioner of Insurance.**

Wis. Stats., sec. 1729b, p. 1248; sec. 1729c, p. 1249.

Biennial report of the Railroad Commissioner.

Wis. Stats., sec. 1795, p. 1322.

Annual report of the Bank Examiner.

Wis. Stats., sec. 2023r, p. 1524.

**Application in writing on which to base a demand on governors
of other states for return of fugitives. Requisition papers from
executives of other states.**

Wis. Stats., sec. 4843, p. 2864; sec. 4847, p. 2866.

Applications for pardons, and papers provided by the statutes.

Wis. Stats., sec. 4857, p. 2888.

Copies of all papers necessary upon application for requisition.

Wis. Stats., sec. 4846, p. 2865.

**Recommendation of superintendent of reformatory and Board of
Control as a prerequisite to discharging reformatory inmates.**

Wis. Stats., sec. 4944, p. 2885.

Annual and biennial reports of Industrial School for Girls.

Ch. 33, L. 1899, p. 49.

Biennial report of Board of Medical Examiners.

Ch. 87, L. 1899, p. 322.

Report of Interstate Park Commissioners.

Ch. 102, L. 1899, p. 139.

Bonds and reports of Trustees of Veteran's Home.

Ch. 122, L. 1899, p. 188.

Copy annual returns Adjutant General to President of U. S.

Ch. 200, L. 1899, p. 309.

Bond and biennial report of Quartermaster General.

Ch. 200, sec. 15, L. 1899.

Bond of Treasurer of Pan-American Exposition.

Ch. 318, L. 1899, p. 585.

Reports of state officers, heads or chiefs of departments, boards, including the U. and Nor. School to be made on or before January 10, each odd-numbered year.

Ch. 97, L. 1901.

Expenditures of Industrial School for Girls.

Ch. 180, L. 1901.

**DISBURSEMENTS IN CONNECTION WITH THE EXECUTIVE
DEPARTMENT.**

For the year ending Sept. 30, 1900.

Salaries of six (6) officials and employees and three additional assistants	\$13,443 00
Governor's contingent fund	1,221 08
Printing, including cost of paper and waste, per report Commissioners of Printing	235 35
Postage and P. O. box rent	250 00
Expressage	19 35
Telegrams	67 95
Telephone	343 33
Stationery, per report Superintendent Public Property	191 45
Total	\$15,781 51

Pages 155, 488 and 500 in the report of the Secretary of State for the year ending Sept. 30, 1900.

SECRETARY OF STATE.

The Secretary of State is also state Auditor by virtue of the constitutional provision.

His duties as Secretary of State are entirely different in character from those as Auditor.

In the former case he is at the head of the department of state, while as auditor he is charged with the duty of auditing all accounts and managing the fiscal affairs of the state and all of its officers, agencies, departments, boards, commissions and institutions.

This distinction should be clearly borne in mind in any investigation of the laws affecting this state officer.

The early acts were specific, precisely worded and definite as to the distinction, but as the statutes have been revised and amended, many sections do not clearly show the division of duty.

In this compilation the early session laws have been consulted to aid in determining the intent of the statutes in which the term "Secretary of State" only frequently appears where it is obvious that the words "as Auditor" should be added.

The laws governing the "Secretary of State as Auditor" follow immediately after those relating to the "Secretary of State."

SECRETARY OF STATE.

How Chosen.

He shall be chosen by qualified electors, when members of the legislature are chosen. Term, two years.

Const., art. 6, sec. 1, p. 100.

Duties generally.

He shall perform duties assigned to him by law.

Wis. Stats., sec. 2, p. 100.

Great seal.

He shall keep the great seal of the state.

Const., art. 13, sec. 4, p. 123.

When Secretary of State to be Governor.

He shall act as Governor in case of vacancy in office of Governor or Lieutenant-Governor.

Const., art. 5, sec. 8, p. 98.

Oath and bond.

Within twenty days after receiving notice of his election and before entering upon his duties, he shall take the constitutional oath of office and give a bond of \$25,000, as provided in this section, which shall be preserved in the executive office.

Wis. Stats., sec. 138, p. 243.

Salary.

His salary is \$5,000 annually, in full for all services including those as Commissioner of Public Lands.

Wis. Stats., sec. 170, p. 259.

Assistant Secretary; his bond salary.

He may appoint an assistant, whose salary shall be \$2,000 annually and whose oath shall be filed in the executive office. Said assistant shall execute a bond to the Secretary. Such assistant may perform all duties of Secretary of State except as Commissioner of Public Lands.

Wis. Stats., sec. 139, p. 244; sec. 170, p. 259.

Clerical help.

He may employ clerks, book-keepers and stenographers as follows:

A chief clerk, at \$1,800 annually.

A recording clerk, at \$1,200 annually.

A filing clerk, at \$1,400 annually.

A registration clerk, at \$1,200 annually.

A notarial clerk, \$1,300 annually.

An incorporation clerk, \$1,400 annually.

A warrant clerk, \$1,200 annually.

A shipping clerk, \$1,200 annually.

A printing clerk, \$1,500 annually.

Assistant printing clerk, \$1,000 annually.

A statistical clerk, \$1,200 annually.

A vault clerk, \$1,200 annually.

Four extra clerks, each \$1,200 annually.

A chief book-keeper, \$1,800 annually.

A first assistant book-keeper, at \$1,600 annually.

Second assistant book-keeper, \$1,300 annually.

A stenographer, \$900 annually.

Total salaries of office, \$33,000 annually, including salary of secretary and assistant secretary.

Wis. Stats., sec. 140, p. 244, amended by ch. 351, L. 1899.

Secretary of State; duties (see also *Secretary of State as Auditor*).

1. He shall keep record of official executive acts, and when required lay all matters relative thereto before the Legislature.

Const., art. VI, sec. 2, p. 100.

2. He shall keep the Great Seal and affix the same to, and counter-sign commissions and other executive acts.

Wis. Stats., sec. 141, p. 244.

He shall make a register of such commissions as herein provided.
(See sec. 135.)

3. He shall have the custody of books, records, deeds, bonds, parchments, maps, papers and other state effects in his office and shall make provision for their preservation; and the same with all accounts and transactions shall be open to examination of the Governor or any Legislative committee. After recording he shall transfer to the executive office all patents, land statements certified by U. S. officers for aiding construction of rail or military wagon roads or for benefit of Fox and Wisconsin rivers improvement or Wisconsin railroad farm mortgage land company. (See ch. 258, L. 1899, sec. 160.)

4. He shall report within 10 days after Sept. 30 each even-numbered year to the Governor, any matters affecting office of Secretary not embraced in Auditor's report, and when required he shall furnish the Governor or Legislature any information relating to his office.

At the close of each odd-numbered year he shall make a condensed statement of state finances and print in the state paper and one other paper politically antagonistic thereto, as herein provided.

Wis. Stats., sec. 335a, p. 314.

5. When required, he shall make copies of laws, resolutions, deeds, bonds, records, doctrines, or other papers in his office attaching thereto his certificate with seal affixed. He shall receive 12c per folio and 25c for certificate.

Wis. Stats., sec. 141, p. 245.

6. He shall keep safely enrolled laws and resolutions and shall not allow them to be taken from his office unless by order of the Governor or legislature. (See section 130.)

Penalty for violation, \$100.

7. He shall deposit with Treasurer, immediately after passage, copies of laws providing for payment of money from treasury. He shall certify to the Treasurer the names of all persons, whose salaries are to be paid from Treasury, specifying office and term of each.

He shall certify vacancies in office immediately upon receiving official information.

8. He shall keep office in the capitol, which shall be open during business hours, except Sundays.
9. He shall include in his biennial report a detailed statement of fees received by him including those received as Commissioner of Public Lands.

He shall include in his biennial report a detailed statement of fees received by the Attorney General and Treasurer and statement of additional tax levied under this section.

He shall cover into treasury every month all such fees to the credit of the general fund.

Wis. Stats., sec. 1072, p. 827; sec. 141, p. 245.

The act requires the Secretary to make a biennial fiscal report within 15 days after legislature convenes as herein provided to enable the legislature to more intelligently consider fiscal matters. The period covered to be from noon on the first Monday in January, each odd-numbered year to noon, first Monday in January, next odd-numbered year.

Ch. 368, L. 1901.

Custodian, deeds, etc.

He shall preserve in his office all deeds, mortgages and other state securities for money and the same shall be open to the public inspection.

Wis. Stats., sec. 142, p. 245.

Enrolled bills to be bound.

He shall cause the original enrolled laws and resolutions, passed by legislature, to be bound with index as provided by this section.

Wis. Stats., sec. 143, p. 245.

Care of books, bills and documents.

He shall care for all books, bills and documents deposited with him by the Chief Clerks of the Legislature.

Wis. Stats., sec. 108, p. 233.

Stationery.

He or his assistant may draw stationery for the state department from the Superintendent of Public Property.

Wis. Stats., sec. 290, p. 301.

Postage.

He may procure for his official correspondence necessary postage stamps or stamped envelopes at state expense.

Wis. Stats., sec. 169, p. 258.

Certificate of appointment of Notary Public.

He shall deliver Notary Public certificates of appointment after there has been deposited in the State Department applicants impression of official seal as herein required, also oath, bond and postoffice address provided payment of \$2.00 is made as herein provided.

Wis. Stats., sec. 174, p. 264.

Notification to Notaries Public.

He shall notify every Notary Public from 30 to 60 days before expiration of commission of time of its expiration.

Wis. Stats., sec. 174, p. 264.

Notice of Election.

He shall give and publish notice between July 1 and September 1 each general election year stating that the election will be held on the Tuesday next succeeding the first Monday in November following.

Wis. Stats., sec. 20, p. 175.

Duty of Secretary of State as to elections to fill vacancies and as to notice for elections of special circuit and county judges.

Wis. Stats., sec. 94 l, p. 222; sec. 94o, p. 224.

Certificates of election.

He shall prepare three lists of names of the electors, procure thereto the signature of the Governor, affix the great seal of the state to the same, and deliver such certificates thus signed to one of the electors on or before the said second Monday in January.

Wis. Stats., sec. 94aa, p. 227.

Election of senators.

He shall file and record a statement of election of U. S. senator delivered to him by order of the President of the Senate and Speaker of the Assembly.

Wis. Stats., sec. 94u, p. 228.

Certificate.

He shall countersign certificate of election.

Wis. Stats., sec. 94v, p. 226; sec. 19, p. 228.

Blue book.

He shall fix expenses of preparing and publishing blue books other than such is covered by printing contract and make distribution as herein provided.

Wis. Stats., sec. 119, p. 236, amended by ch. 29, L. 1899.

He is allowed 125 copies of blue book.

Wis. Stats., sec. 121, p. 236.

He shall keep two (2) legislative dockets as herein provided.

Ch. 243, L. 1899.

A committee consisting of two members from the Senate and three from the Assembly shall be called the 'committee of printing' and shall have power to examine all papers and documents on file in the office of the Secretary of State and all printed matter of the state.

Wis. Stats., sec. 206, p. 233.

Census.

He shall supervise the taking of state census in 1905 and every 10 years thereafter.

Ch. 45, sec. 992, p. 773.

Record of taxes.

He shall record so much of the abstract as will aggregate, amount of each, kind of tax levied and include a condensed statement thereof in his biennial report.

Wis. Stats., sec. 1006, p. 778.

He is hereby authorized and directed to include in the appropriate tax levies sums sufficient to satisfy the annual appropriation hereby made.

Ch. 322, L. 1901.

Statement of sales of real estate.

Each Register of Deeds shall on or before each Sept. 1, make to the Secretary of State a statement of real estate sales. (On page 779, R. S., is given the requirements for such statements.)

Wis. Stats., sec. 1007, p. 778.

Statement, to be compiled.

He shall make a compilation from such statement for State Board assessment and may include the same in his biennial report.

Wis. Stats., sec. 1008, p. 779.

He shall prepare statistics for the Board of Assessments.

Wis. Stats., sec. 1069, p. 826.

This law constitutes the Commissioner of Taxation the first and second assistants of the commissioner, a State Board of Assessment and prescribes the duties of the Secretary of State in relation thereto.

Ch. 237, L. 1901.

Statistics of farm products.

County clerks shall furnish him statistics of agricultural products procured from assessors' reports.

Wis. Stats., sec. 1010, p. 779.

Blanks to be furnished by him.

He shall furnish officials necessary blanks and instructions for returns and statistics.

Ch. 308, L. 1899.

Wis. Stats., sec. 1000, p. 778; sec. 1011, p. 780; sec. 1013, p. 781; sec. 1023a, p. 786; sec. 1024a, p. 787; sec. 1025, p. 788; sec. 1026, p. 789; sec. 1032, p. 794.

Statistics as to defective classes.

He shall include statistics furnished him under this Ch. in form of condensed statement in next biennial report.

Wis. Stats., sec. 1013, p. 780; sec. 1014, p. 780.

Neglect of duty.

He shall prosecute such clerks for forfeiture provided for failure to perform duties required by chapter 46.

Wis. Stats., sec. 1019, p. 781.

Duty of register.

He shall file and record statistics of marriages, deaths, and births transmitted to him by the Register of Deeds.

Wis. Stats., sec. 1026, p. 789.

Statement to be sent for.

He may send a messenger for delinquent reports and statements herein provided and expense thereof collected with next state tax of such county.

Wis. Stats., sec. 1068, p. 825; sec. 1016, p. 781.

May require searches.

The Secretary of State, Treasurer and Attorney General may require searches for papers, records and documents in the respective offices of each other as herein provided.

Wis. Stats., sec. 2963, p. 2075.

Commissioners of public lands.

He shall be one of the commissioners for the sale of the school and university lands and for the investment of the funds arising therefrom.

Wis. Stats., sec. 7, p. 120.

Statement of loans.

He shall furnish county clerks a statement of loans made from trust funds as herein provided.

Wis. Stats., sec. 258e, p. 293.

Provides for date of interest payment on trust fund loans.

Ch. 72, L. 1901.

Public lands and land mortgaged to state.

He shall transmit to county clerks an abstract of public lands and lands mortgaged to the state. See sections, 1078, 1112, 1145, 1146, 1147.

Wis. Stats., sec. 1046, p. 810.

Record; certificate.

He shall record copies of trade-marks, labels and counterparts and may collect a fee of \$1.00 therefor.

Wis. Stats., sec. 1747a, p. 1257.

Certificate; evidence.

He shall give a certificate of filing and recording such papers and may collect therefor a fee of \$1.00.

Wis. Stats., sec. 1747b, p. 1258.

Record of brands, etc.

He shall record description of names, brands, trade-marks, upon demand, and the fee therefor shall be \$5.00.

Wis. Stats., sec. 1747d, p. 1258.

Deposit.

Title Guaranty company's bonds or security subject to his approval.

When suit may be commenced, upon receipt, he shall issue certificate as herein required.

Wis. Stats., sec. 1777i, p. 1301.

Conveyances, etc., how executed and recorded.

He shall endorse his certificate on railroad mortgages and conveyances and satisfaction thereof, specifying day, hour and minute of reception and volume and page where recorded.

Wis. Stats., sec. 1839, p. 1356.

Capital stock.

He shall authorize trust companies to commence business when this section is complied with.

Wis. Stats., sec. 1791d, p. 1316.

He shall compute amounts due each county for maintaining county hospitals, as herein provided.

Ch. 271, L. 1899.

Collection of charges.

He shall include in tax levy amount due from counties for support of inmates in Home for Feeble Minded and notify county clerks and Board of Control.

Wis. Stats., sec. 573, p. 423.

Care of non-residents.

He shall credit the county, in whose asylum insane are cared for, \$3.00 per week each and clothing.

One-half of this \$3.00 and all of clothing he shall charge to the county from which sent, as herein provided.

Wis. Stats., sec. 604f, p. 441.

Accounts, rendition and approval of.

He shall refer to the Board of Control for approval names of insane received from county asylums, and thereupon he shall credit amount due each county on state tax next due.

Wis. Stats., sec. 804e, p. 440.

Meeting of board; statements, record and publication.

He shall appoint a meeting of State Canvassers and record statements and determinations, as herein provided.

Wis. Stats., sec. 94a, p. 217; sec. 94b, p. 218; sec. 94d, p. 219.

Messengers' compensation; election and registry blanks.

He shall fix a reasonable compensation for messenger services for election returns and prepare all necessary election and registry blanks.

Wis. Stats., sec. 94h, p. 220; sec. 94i, p. 221.

License, application; license for circus.

Peddlers and patent-right dealers and circus exhibitors desiring license shall make a written application to him, giving information as herein provided.

Wis. Stats., secs. 1571, 1573, p. 1156; sec. 1574, p. 1157, amended by ch. 341, L. 1901.

Issue of license; soldiers exempt.

He shall, upon payment of fees, grant license to applicants who have filed treasurers' receipts showing payment of license fees.

He may license soldiers of the rebellion without fees. (See sec. 1579.)

Wis. Stats., sec. 1575, p. 1157.

Proceeds of sale.

He shall keep a correct record of proceedings of the "Board to determine disposition of state chattel property" and embody in his biennial report a detailed account of all sales made.

Wis. Stats., sec. 295, p. 302.

Preservation and sale of documents, etc.

He shall compute cost price at which Superintendent of Public Property may sell copies of state publications as herein provided.

Wis. Stats., sec. 360, p. 323.

Articles, how amended, recorded.

He shall publish notice of amendments to articles of incorporation as herein provided.

Wis. Stats., sec. 1774, p. 1290.

Examination of work; accounts.

He shall examine printing executed under this chapter and see that it is properly and legally done.

He shall keep accurate account of paper delivered to the State Printer and see that it is used with no unnecessary waste. (See secs. 323, 324, 325.)

Wis. Stats., sec. 326, p. 311.

Accounts; examination of.

He shall examine, compare and correct all accounts for work and material under this chapter, aided, if necessary, by a practical printer, as herein provided.

Wis. Stats., sec. 328, p. 311.

Printing laws and journals.

He may delay the printing of the regular session laws until adjournment of the extra session so that laws of both may be printed and bound together.

Wis. Stats., sec. 338, p. 316.

In official paper; copy for state paper and printer.

He shall supervise publication of laws in state paper, furnish a copy of laws to such paper and at close of every session he shall furnish a copy of laws with index notes and catch-lines to State Printer, as herein required.

Wis. Stats., secs. 329, 330, p. 312.

Local laws.

He shall at once, after publishing local laws in state paper, furnish copy for publication to paper at place to which subject relates, also to clerks of cities and villages when afflicted by the laws.

Wis. Stats., sec. 332, p. 313.

Publication of laws in newspapers.

He shall supervise the publication of "copy laws," as herein provided, in newspapers of the state.

Wis. Stats., sec. 331, p. 312.

Assessment and election laws.

He may print in pamphlet form for county and town officers a compilation of assessment and collection laws, as herein provided.

Wis. Stats., sec. 342, p. 317.

Parts stricken out.

Parts of reports stricken by the Commissioners of Public Printing shall be copied in a book by the Secretary of State and returned to officers making reports, as herein provided.

Wis. Stats., sec. 333, p. 313.

Orders for paper; waste or conversion.

He shall deliver his order on the Superintendent of Public Property to State Printer, preserving a duplicate thereof. "Waste" to be allowed for as herein provided.

Penalty for conversion of paper.

Wis. Stats., sec. 312, p. 307.

Who may make.

He shall issue orders for printing, ruling and binding except what may be ordered by Legislature or required by law.

Wis. Stats., sec. 314, p. 308.

Public documents.

He may order public documents bound in two volumes when pages exceed 1,500.

Wis. Stats., sec. 319, p. 309.

Laws.

He shall number session laws in consecutive chapters as received from the Governor and annex his certificate, as herein provided.

Wis. Stats., sec. 320, p. 309.

Printing and binding.

He shall cause State Printer to do binding for Historical Society, as herein provided.

Wis. Stats., sec. 375, p. 327.

He may authorize the State Printer to bind all periodicals of Wisconsin Academy of Science and Arts and shall audit the accounts therefor.

Ch. 186, L. 1901.

Penalties upon counties.

He shall add 10 per cent. to each county apportionment as penalty
• in cases where taxes are withheld.

Wis. Stats., sec. 1124, p. 849.

Method of apportionment.

He shall annually apportion the state tax among the counties in proportion to relative valuation of each county to aggregate value.

He shall certify on or before the first Monday in October to each clerk the amount of such taxes apportioned into special charges as herein provided.

He shall charge to each county the entire amount of taxes and charges.

Wis. Stats., sec. 1070, p. 827.

Appropriations in excess of levy.

Where appropriations and existing laws exceed the amount of tax levied, he shall levy and apportion such additional amount as may be necessary. (See note to Constitution, article 8, section 5, which possibly conflicts.)

Wis. Stats., sec. 1071, p. 827.

Collection of taxes paid on failure of title.

He shall in case state has failed to furnish complete title to land, certify as an additional tax so much of the money paid to each county for other than school purposes.

Wis. Stats., sec. 232, p. 283.

Apportionment of interest and tax to pay.

He shall annually levy a tax sufficient to pay interest on certificate of indebtedness.

Wis. Stats., sec. 260, p. 294.

Agricultural College Fund.

He shall add to the state tax to be levied a sum to replace any part of the Agricultural College Fund diminished or lost.

Fund shall be kept intact.

Wis. Stats., sec. 249, p. 287.

State aid.

He shall yearly include and apportion in state tax sums expended in aid of free high schools.

Wis. Stats., sec. 491b, p. 385; sec. 496, p. 387.

Preparation and issuance of fee.

He shall prepare license for hunting game in two forms: Non-resident license named by him shall be countersigned by the Fish and Game Warden. Fees paid over to the Treasury. Fees to hunt deer, \$25.00. All kinds except deer, \$10.00.

Wis. Stats., sec. 1498p, p. 1115; sec. 1498q, p. 1115; sec. 1498r, p. 1116, amended by ch. 312, L. 1899.

Articles to contain what; fees.

This section provides what written articles to form Wisconsin corporation shall contain and what fees shall be paid for filing with Secretary of State.

Wis. Stats., sec. 1772, p. 1286, amended by ch. 238, L. 1901.

No fee when no capital stock or when corporation for charitable or reformatory purposes.

Filing articles.

Foreign corporations, fee \$25 for filing copy of charter or articles of incorporation.

Amendments thereto, \$15.

Wis. Stats., sec. 1770b, p. 1279.

Blanks.

The Secretary of State shall prescribe and furnish the several officers with blanks as herein provided.

Wis. Stats., sec. 1082, p. 794.

Statement to be sent for.

Each county clerk upon the receipt of such statement shall make an abstract of the same and transmit it to the Secretary of State in September.

Statement to be sent for upon failure to do as provided in the preceding section.

Wis. Stats., secs. 1067, 1068, p. 825.

BOARDS OF WHICH THE SECRETARY OF STATE IS A MEMBER.**State Board of Immigration.**

Ch. 279, L. 1899, p. 483.

Ex-officio member of Executive Committee of State Historical Society.

Wis. Stats., sec. 374, p. 327.

Board to examine and direct disposition of unused state chattel property.

Wis. Stats., sec. 294, p. 302.

Commission to adjust the claim of Robert S. Houston.

Ch. 174, L. 1899, p. 255.

Commissioners of Public Lands.

Wis. Stats., sec. 185, p. 269.

Commissioners of Public Printing.

Wis. Stats., sec. 296, p. 303.

State Board of Canvassers.

Wis. Stats., sec. 93, p. 217.

State Board of Assessment.

Wis. Stats., sec. 1069, p. 826.

Board of Deposits, as one of the Commissioners of Public Lands.

Wis. Stats., sec. 180a, p. 253.

DUTIES OF SECRETARY OF STATE ACTING WITH OTHER STATE OFFICERS—NOT INCLUDING THE ABOVE.

With the State Treasurer and Attorney General and with the consent of the Governor, he may transfer trust funds to the general fund.

Ch. 147, L. 1899, p. 217.

Power when state affected by suits.

With the Governor and Treasurer he may employ counsel as herein provided.

Wis. Stats., sec. 131, p. 241.

Certificates of indebtedness; interest.

In connection with the officers mentioned in section 131, he may execute certificates of indebtedness and apportion funds in the treasury.

Wis. Stats., sec. 259, p. 294; sec. 1069a, p. 827.

Debt against state.

With Governor and Attorney General he may issue authority to create indebtedness as herein provided.

Wis. Stats., sec. 5611, p. 409; sec. 563, p. 414.

Index.

With Attorney General's assistance he shall prepare and publish index as herein required.

Wis. Stats., sec. 328, p. 311.

WHAT THE STATUTES DECLARE MUST BE DEPOSITED OR FILED IN OFFICE OF
SECRETARY OF STATE.

Statement of election of United States Senator.

Wis. Stats., sec. 94u, p. 226.

Certified statement of vote by counties.

Wis. Stats., sec. 94, p. 217.

Certified statement and determination of Board of Canvassers.

Wis. Stats., sec. 94b, p. 218.

Returns of Presidential vote.

Wis. Stats., sec. 94c, p. 218.

Description of Executive privy seal.

Wis. Stats., sec. 98, p. 230.

Notice of contested election.

Wis. Stats., sec. 104, p. 252.

Books, bills and documents of Legislature, for safe-keeping.

Wis. Stats., sec. 108, p. 233.

Acts and resolutions of Legislature.

Wis. Stats., sec. 130, p. 240.

All patents issued by the Governor.

Wis. Stats., sec. 135, p. 242.

All deeds, conveyances, leases, bonds, mortgages and other securities for money belonging to state, unless otherwise directed.

Wis. Stats., sec. 142, p. 245.

Assistant State Treasurer's oath and certificate of appointment.

Wis. Stats., sec. 158, p. 252.

Orders of Commissioners of Public Lands directing investments.

Wis. Stats., sec. 160, p. 252.

A record of the proceedings of the Board of Deposits.

Wis. Stats., sec. 16a, p. 253.

Sworn statements of state depositories.

Wis. Stats., sec. 160f, p. 254.

Notaries Public application, oath and bond.

Wis. Stats., sec. 174, p. 264.

Commissioners of Deeds, impression of seal and postoffice address.

Wis. Stats., sec. 182, p. 267.,

Certificates of Indebtedness by Commissioner of Public Lands.

Wis. Stats., sec. 258c, p. 292.

Duplicate Certificates of Indebtedness representing bonds purchased and cancelled bonds when paid.

Wis. Stats., sec. 259, p. 294.

Itemized bills of stationery purchases.

Wis. Stats., sec. 289, p. 300.

Duplicate of Superintendent of Public Property's report.

Wis. Stats., sec. 291, p. 301.

Bids for state printing.

Wis. Stats., sec. 301, p. 304.

Bonds of bidders for public printing.

Wis. Stats., sec. 302, p. 305.

Paper purchased by Commissioners of Public Printing.

Wis. Stats., sec. 310, p. 307.

All paper in possession of the State Printer. March 1, June, September and December.

Wis. Stats., sec. 313, p. 307.

Copies of work ordered of State Printer and copy of each document executed.

Wis. Stats., sec. 323, p. 310; sec. 327, p. 311.

Proof of publication of laws.

Wis. Stats., sec. 331, p. 312.

Written approval of commissioners consenting to enlargement of reports.

Wis. Stats., sec. 337, p. 316.

Supreme Court Reporter's bond, to be approved and his appointment and salary to be certified to the Secretary of State.

Wis. Stats., sec. 346, p. 318.

250 Wisconsin reports free within 60 days after delivering manuscript.

Wis. Stats., sec. 347b, p. 318.

All public documents and Supreme Court reports and receipt of Superintendent of Public Property covering same.

Wis. Stats., sec. 348, p. 320.

State Librarian's bond is executed to the state. Statute does not provide where it shall be filed.

Wis. Stats., sec. 368, p. 324.

Oaths of members of Board of Control.

Wis. Stats., sec. 561a, p. 406.

Bonds of Steward and other officers of the state charitable, reformatory and penal institutions, which may be fixed by the Board of Control.

Wis. Stats., sec., 561 i, p. 412.

Consent of Board of Control to adoption of children.

Wis. Stats., sec. 573j, p. 422.

Certification of Trustees of County Asylums of names of insane.

Wis. Stats., sec. 604c, p. 440.

Certification of completion of County Asylums.

Wis. Stats., sec. 604d, p. 440.

Names of insane from County Asylums.

Wis. Stats., sec. 604e, p. 440.

Duplicate of orders of Governor fixing pay of Quartermaster General.

Wis. Stats., sec. 630, p. 455.

County clerks' returns.

Wis. Stats., sec. 1005, p. 778.

Register of deed's statements.

Wis. Stats., sec. 1007, p. 778.

County clerks' statistics.

Wis. Stats., sec. 1010, p. 779; sec. 1014, p. 780.

Duplicates of assessors' reports to county clerks.

Wis. Stats., sec. 1012, p. 780.

Statistics of indebtedness, when Secretary of State requires.

Wis. Stats., sec. 1017, p. 781.

Copies of register of deeds' records.

Wis. Stats., sec. 1026, p. 789.

County clerks' abstract of property statements.

Wis. Stats., sec. 1067, p. 825.

List prepared by Board of Assessment, and journal of proceedings.

Wis. Stats., sec. 1069, p. 826.

Certification by State Superintendent of apportionment of school tax fund.

Wis. Stats., sec. 1072a, p. 827.

Bond of supervisor of Inspectors of Illuminating Oils.

Wis. Stats., sec. 1421b, p. 1068.

Sworn statements of officers of county agricultural societies.

Wis. Stats., sec. 1463, p. 1091.

Oath of State Veterinarian.

Wis. Stats., sec. 1492, p. 1101.

Application of those desiring to be licensed as peddlers, patent-right dealers and circus exhibitors.

Wis. Stats., sec. 1571, p. 1156; sec. 1573, p. 1156; sec. 1574, p. 1157.

Treasury Agent's oath and bond.

Wis. Stats., sec. 1578, p. 1158.

Applications for licenses by Treasury Agent.

Wis. Stats., sec. 1579, p. 1158.

Copies, counterparts or facsimiles of trade-marks as herein provided.

Wis. Stats., sec. 1747a, p. 1257.

Foreign manufacturing corporations' statements.

Wis. Stats., sec. 1770a, p. 1279.

Foreign corporations-copy charter and articles.

Wis. Stats., sec. 1770b, p. 1279.

Verified copy articles of incorporation of Wisconsin corporations.

Wis. Stats., sec. 1772, p. 1286; sec. 1174, p. 874.

Written agreement abandoning corporations.

Wis. Stats., sec. 1773, p. 1288.

Copy of amendments to articles of incorporations.

Wis. Stats., sec. 1774, p. 1290.

Title guaranty companies' statements and bonds or securities with power of substitution.

Wis. Stats., sec. 1771, p. 1301.

Bonds of private corporations conducting private asylums.

Wis. Stats., sec. 1786a, p. 1307.

Certificate of dissolution of Wisconsin corporation.

Wis. Stats., sec. 1789, p. 1311.

Affidavit and annual report of trust company.

Wis. Stats., sec. 1791d, p. 1316.

Report of Insurance Commissioner, first day of each month.

Wis. Stats., sec. 1792c, p. 1321.

Railroad Commissioner's bond.

Wis. Stats., sec. 1793, p. 1321.

Power of attorney of non-resident railway equipment companies.

Wis. Stats., sec. 1795c, p. 1323.

Copies of records, resolutions, articles, etc., from railroad companies in case of new branches, altering route, making consolidation, changing name, agreement with stockholders, as herein provided.

Wis. Stats., sec. 1820, p. 1342; sec. 1831, p. 1350; sec. 1832, p. 1350; sec. 1835, p. 1353; sec. 1858, p. 1371.

Railroad mortgages, conveyances or satisfaction thereof for recording railroad agreements regarding land sales.

Wis. Stats., sec. 1839, p. 1356.

Articles and affidavits of turnpike and plank road companies.

Wis. Stats., sec. 1865, p. 1377.

Deputy Insurance Commissioner's oath; his bond shall run to Commissioner.

Wis. Stats., sec. 1967, p. 1483.

Insurance Commissioner detailed report the first of each month.

Wis. Stats., sec. 1972c, p. 1487.

Certificate as to State Grange.

Wis. Stats., sec. 2007, p. 1509.

Bank Examiner's oath, bond and seal.**Certificate of Governor's approval.**

Wis. Stats., sec. 2023h, j, p. 1522.

Oaths of supreme judges and clerk.

Wis. Stats., sec. 2398, p. 1727; sec. 2399, p. 1727.

- Certificate of Supreme Court Justices as to employment or discharge of stenographer, janitors and messenger.

Wis. Stats., sec. 2400, p. 1727.

- Circuit Court Judges' oaths.

Wis. Stats., sec. 2419, p. 1742.

- Transcript of judgment against state by Supreme Court Clerk.

Wis. Stats., sec. 3203, p. 2207.

- Judgment roll in actions against corporations.

Wis. Stats., sec. 3249, p. 2224.

- Warden's bond.

Wis. Stats., sec. 4396, p. 2377.

- Deputy warden's and clerk's bond.

Wis. Stats., sec. 4903, p. 2378.

- Copy of account made by warden of prison, after audit and allowance by U. S. government.

Wis. Stats., sec. 4933, p. 2383.

- Cancelled bonds, by Commissioners of Public Lands.

Ch. 130, L. 1899, p. 199.

- Reports of county clerks of taxes levied.

Ch. 243, L. 1899, p. 402.

Ch. 143, L. 1899, p. 212.

- Authorization to act by legislative counsel and agents and account of expense of such counsel and agents.

Ch. 270, L. 1899, p. 460.

Ch. 258, L. 1899, p. 425.

- Duplicate of Insurance Commissioner's certificates to certain insurance companies.

- On Jan. 1, 1901, records, plats, field notes and papers of land office.

- Certificate of Board of Control as to number of acute and chronic insane.

Ch. 271, L. 1899, p. 469.

- Notice of intention and bond by those offering to furnish equipments for telephone purposes, together with bond, as herein provided.

Ch. 309, L. 1899, p. 543.

County treasurers' reports as to estates liable to inheritance tax.

Ch. 355, L. 1899, p. 668.

The official seal and signature of county judges.

Ch. 1, 5, L. 1901.

Ch. 31, L. 1901.

The expenses of the Board of the Pan-American Exposition with approval of the Governor endorsed thereon.

Ch. 318, L. 1899.

Oath of members of Commission of Inter-State Park of the Dalles of the St. Croix.

Ch. 305, L. 1901.

DISBURSEMENTS IN THE STATE DEPARTMENT

For the year ending Sept. 30, 1900.

Salaries of twenty-two (22) officials and employees.....	\$33,000 00
Printing and publishing, including cost of paper and waste, per report	
Commissioners of Printing	3,940 05
Postage and P. O. box rent	844 00
Expressage	486 97
Telegrams	27 62
Telephone	281 24
Revenue stamps	175 00
Compiling and annotating election laws	150 00
Freight	286 23
Stationery, per report Superintendent Public Property	283 64
Sundry items	48 00
Total	\$39,522 75

Pages 155, 156, 488 and 500 in the report of the Secretary of State for the year ending Sept. 30, 1900.

SECRETARY OF STATE AS AUDITOR.

An explanation is given in the introductory note preceding the laws governing the Secretary of State, showing the dual character of the duties to be performed by this officer. See ante, page —.

As there fully shown when acting as Auditor, his duties are entirely separate and distinct from those devolving upon him as Secretary of State and a separate report is required by law to be made.

In the following sections are given the general duties of the Auditor, also many of the specific obligations resting upon him in connection with various departments, officials, agencies and branches of the state government and its institutions.

His power is mainly derived from the early state laws which are found in sections 144 to 151, inclusive, of the Wisconsin Statutes of 1898, pages 246 to 248, inclusive. The force and effect of these laws and of the Constitutional provision upon which they were founded, have been clearly stated in two (2) decisions of the Supreme Court reported in Vol. 10, Wisconsin Decisions, page 525 and Vol. 82, Wisconsin Decisions, pages 39-51. These decisions define the meaning of audit, declare it to be the duty of the Auditor to audit all disbursements of the state and sign warrants therefor, that the Legislature can not divest him of the exclusive power to audit all accounts and that the power to audit can not be exercised by any other officer or board. This duty to audit is expressly declared to be a personal one and can not be delegated to an assistant or employee.

Chapter 433 of the laws of 1901, which appears on page 368 of this pamphlet, provides for a centralized system of accounting for all state officers, institutions, societies, departments, boards, commissions, including the University and Normal Schools.

The accounting plan therein referred to by provision of section 1 is to be established by the Governor. Its effect will be to

restore the practise which prevailed during the early years of the state's existence and to discontinue the transferring of money appropriations in lump sums to the exclusive control of the state institutions and commissions. The transfer of appropriations may be made in the fund accounts, but the Auditor must authorize the final payments which must appear on itemized vouchers showing in detail the debt to be paid. Another effect of the investigation and legislation along these lines and of the centralizing of all accounts will probably be to make necessary the rewording of many sections of the Statutes which now improperly employ the word "audit" instead of "allow" or "approve" in defining the duties of several of the Boards and commissions. Under the decisions of the Supreme Court referred to, the Legislature has no power to confer the power to audit upon any other person, officer or Board.

SECRETARY OF STATE AS AUDITOR.

The Secretary of State shall be *ex-officio* Auditor.

Const., art. 6, sec. 2, p. 100.

Duties—To manage fiscal affairs.

1. He shall superintend the fiscal affairs of the state and manage the same.

General duty.

6. He shall suggest plans for the improvement and management of public revenues.

Accounts.

2. He shall keep fair, clear, distinct and separate accounts of revenues of state and all moneys and funds received or held by the state, and all expenditures, disbursements, and investments, showing the particulars of every disbursement or investment.
7. He shall keep and state all accounts (including accocunts with U. S.) in which the state is interested.
8. He shall examine and settle accounts of all persons indebted to the state.

Collection of money.

9. He shall direct and superintend the collection of moneys due the state.

Claims.

10. He shall examine, determine and audit claims against the state.

Recording accounts audited.

11. He shall enter, in a book for that purpose, a record of all accounts audited by him, showing name of claimant, amount claimed, amount allowed, the number, date and amount of warrant drawn, specifying the fund from which the same is to be paid.

To require returns of property.

12. He shall require those who have received money, property or goods belonging to the state, who have not accounted therefor, to settle their accounts and return property, money or goods to the state.

Wis. Stats., sec. 144, p. 246.

Money securities—Property to be accounted for.

He shall, from time to time, require all persons receiving money or securities, or having management of property of the state, of which an account is kept in his office, to render statements thereof to him, and all such persons shall render such statements as he requires.

(This is from sec. 21, ch. 9, R. S. 1849, and sec. 32, ch. 10, R. S. 1858, amended.)

Wis. Stats., sec. 149, p. 248.

Accounts how verified and audited.

He shall audit accounts and claims where payment is provided by law, when rate fixed by law, or authorized to be fixed by some officer or person, or by the Secretary of State.

Every claim or account that is settled to audit must specify nature and particulars verified by oath, in writing, together with certificate of officer ordering or making claim.

He may require persons making claims to be sworn touching same, and to answer as to facts relating to justness thereof. No claim for traveling expenses is to be audited unless there be an affidavit attached as to pass or free transportation, and must state that money was actually paid out.

Blank forms of such affidavits are to be furnished to all persons who travel on business and at expense of the state. The order of audit shall be endorsed on or annexed to claim, and shall specify the amount allowed, and from what fund payable, and the act, or part of act, which authorized payment.

All papers connected with such claims are to be preserved in his office.

See chapter 433, laws of 1901, *ante*, p. 368.

Wis. Stats., sec. 145, p. 247.

Salary accounts.

He shall audit all accounts for salaries directed by law to be paid for clerk-hire and services where the employment of persons who render services to state is, or may be, authorized upon certificate of proper officer, setting forth nature of service and necessity therefor.

Wis. Stats., sec. 148, p. 248.

Compensating court clerks for reports.

He shall audit account for compensation of clerks of courts of criminal jurisdiction for reports made to the Governor under provision of section 1020 on certificate of the Governor.

Wis. Stats., sec. 1021, p. 782.

Warrants payable to claimants—Report.

He shall draw his warrant on Treasurer payable to claimant, for amount allowed on every claim audited, which shall specify from what fund to be paid, and the particular act, or part of act, authorizing payment and he shall only credit Treasurer for money paid out on such warrants.

He shall set forth in his biennial report the name of each person in whose favor warrants are drawn, the gross amount so paid each person during the biennial term, and the character of service rendered by him.

See chapter 433, laws of 1901, *ante*, p. 368.

Wis. Stats., sec. 146, p. 248.

He shall issue warrants for amounts due counties from swamp-land fund.

Wis. Stats., sec. 251, p. 288.

Publishing Laws.

He may cause to be published in newspapers law or extracts relating to collection or payment of money due or to become due, or duties to be performed by state officers, with appropriate forms, as he may deem necessary, at state expense.

Wis. Stats., sec. 150, p. 248.

He shall audit the account for publishing laws.

If no other provision fixes compensation, it shall be fixed by the law for publication of legal advertisements.

Wis. Stats., sec. 151, p. 249.

The fees for publishing laws, advertisements, proclamations and communications, required by law to be published in state paper, shall be the same per folio as provided by law for publishing legal advertisements, but not exceeding 50 cents for each description of land. (For section providing for payments of \$100 each to newspapers for publishing laws, see under Secretary of State.)

Wis. Stats., sec. 345, p. 317.

Printing accounts.

He shall audit all accounts for work executed (and certified to by Secretary of State) under the provision of this chapter, and keep a record of cost of printing, ruling, and binding, the amount of paper used and the entire expense of each document or job and a copy of each document or job shall be filed with cost endorsed thereon. See sec. 328.

Wis. Stats., sec. 326, p. 311.

Paper Contractors' samples.

Samples of paper shall be delivered to him by the contractor with his bill for paper furnished. If any error is found in such account, he shall correct and return the same to the contractor.

W. s. Stats., sec. 312, p. 307.

Waste allowed.

Ten per cent. is allowed to the State Printer for waste on jobs of ten quires or less and 5 per cent. on jobs exceeding ten quires.

Wis. Stats., sec. 313, p. 307.

Postage—Accounts.

He shall audit accounts for postage stamps and stamped envelopes, when presented in the manner prescribed by law, for the following: Governor, Secretary of State, State Treasurer, Attorney General, State Superintendent, Railroad Commissioner, Commissioner of Insurance, Clerk of Supreme Court, Secretary of State, Historical Society, State Librarian, Secretary of State Board of Agriculture, Adjutant General, Quartermaster General, Treasury Agent, State Veterinarian, State Board of Control, Commissions of Fisheries, Dairy and Food Commissioner, Commissioner of Labor Statistics, State Superintendent of Public Property, Secretary of Free Library Commission and Bank Examiner.

Wis. Stats., sec. 169, p. 258.

Messenger service for delinquent statistics.

He shall audit amount paid messenger service in getting in statistics where county officials are delinquent and shall add amount to next state tax for such county.

Wis. Stats., sec. 1016, p. 781.

Education of deaf-mutes.

He shall audit the sums to be paid in aid of schools for education of deaf-mutes, upon a certificate of president and secretary of school board and the superintendent of schools of the city where the school is located, or other proper officers, when such certificates are approved by the State Superintendent and President of Board of Control, and he shall thereupon issue warrant in favor of the treasurer of such city or village for amount due.

Wis. Stats., sec. 579, p. 426.

Bounty on wild animals—County clerks' certificates.

County clerks shall send him certificates under official seal that the scalps of animals killed have been presented with ears entire. Such oath and certificate shall state amount paid by county. Upon receipt of oath and certificate, made upon blanks furnished by him, he shall audit claim for amount county has paid under provisions of law.

Wis. Stats., sec. 1628, p. 1182, amended by ch. 45, L. 1899, amended by ch. 311, L. 1901.

Interest on certificates of indebtedness.

He shall annually, on or before May 10, compute the interest on all certificates of indebtedness belonging to each fund separately, including May 31, and give credit to income of such fund, and enter a credit upon the several certificates for the amount found due on each and certify to officers authorized to apportion income of such fund and certify to Treasurer such amount. The amounts apportioned shall be paid to the person authorized by law to receive the same and audited.

Wis. Stats., sec. 260, p. 294.

Fiscal year.

Provides that all books shall be kept, and all duties performed, with reference to the beginning, Oct. 1, and the ending, Sept. 30, of fiscal year.

Wis. Stats., sec. 158, p. 252.

Railway transportations.

This act provides conditions under which the Auditor may approve accounts for railway transportation. It is provided that a statement showing the number of miles traveled, the date, and the points covered with, and explicit statement of the public business transacted.

Ch. 426, L. 1901.

NOTE.—For details under this head the act itself should be consulted.

While all state departments, boards, institutions, commissions and all state officers and employes thereof are embraced within the general provisions elsewhere given relating to the auditor, in the following cases the power to audit is specifically outlined:

AUDITOR IN CONNECTION WITH THE LEGISLATURE.

Claims requiring legislative action.

He shall see that all claims requiring legislative action are made in duplicate, in the manner provided by section 145, and filed in his office.

He shall examine the same to see if properly made and justly due, and shall report same to legislature, with recommendations, and designate the fund to which they are chargeable. He shall see that proper account for which appropriation is made, is filed in his office before drawing his warrant on the Treasurer, whenever a bill appropriating money for a claim shall become a law.

Wis. Stats., sec. 147, p. 248.

Warrants.

He shall draw warrants upon certificates of chief clerk and sergeant-at-arms of each house at close of each session, for compensation of officers of legislature. He shall publish in the state official paper a full list of the accounts so audited.

Wis. Stats., sec. 113, p. 235.

Witness fees.

He shall audit account of witnesses before legislative committee, upon certificate of chairman of such committee.

Wis. Stats., sec. 127, p. 229.

Mileage and salary accounts of members.

He shall audit, except where the member's election is contested, the account for mileage or salary of members of the legislature. The speaker of the assembly shall be entitled to receive the same compensation, except mileage, as allowed to the other members of legislature, for his services as speaker, in addition to his pay as member, but in case of extra session no compensation is allowed.

Wis. Stats., sec. 110, p. 234; sec. 111, p. 234.

IN CONNECTION WITH THE GOVERNOR.

Examining treasury.

He shall, as auditor, examine carefully, quarter-yearly, the affairs of the Treasurer's office and immediately give a detailed report regarding the same to the Governor, as herein provided.

Wis. Stats., secs. 144-5, p. 246.

Statement of state funds.

He shall, as auditor, exhibit to and deposit with the Governor, within 10 days after Sept. 30, each year, a complete detailed statement of state funds, revenues, receipts and expenditures, as herein provided.

Wis. Stats., sec. 144-13, p. 246.

Financial report.

He shall make a financial report to the Governor at the close of each odd-numbered year, which shall be a condensed financial statement.

Wis. Stats., sec. 335a, p. 314.

Examining Insurance Department.

He shall, in connection with the Governor and State Treasurer, audit quarterly the accounts and records of the Insurance Department.

Wis. Stats., sec. 1972c, p. 1487.

Witness fees in pardon proceedings.

He shall audit fees and expenses of witnesses in proceedings to determine whether convicts have violated conditional pardons, when approved by the Governor.

Wis. Stats., sec. 4863, p. 2870.

Warrants for forest wardens.

He shall issue warrants in favor of the forest warden and deputies on approval of governor.

Wis. Stats., sec. 1636e, p. 1186.

IN CONNECTION WITH TREASURER'S OFFICE.

Countersigning receipts.

He shall countersign all receipts of Treasurer for money paid into the treasury and charge with same, entering them into his book to the credit of the county, officer or person making the payment.

Wis. Stats., sec. 144 3, p. 246.

To charge Treasurer amount paid by land purchaser.

He shall charge Treasurer with amount for which receipt is given to land purchaser and enter person's name and number of certificates, if any, and time of payment.

Wis. Stats., sec. 216, p. 277.

To keep account between state and treasurer.

He shall keep an account between the state and Treasurer, and charge the Treasurer with the balance in the treasury when he came into office and with all the moneys received by him, and all bonds and securities belonging to all public funds on deposit in the treasury, and credit him with all moneys paid by him pursuant to law.

Wis. Stats., sec. 144-4, p. 246.

Examining treasury.

He shall, quarterly, examine all books and accounts of the Treasurer, and all moneys and bonds and securities belonging to public funds in treasury.

Wis. Stats., sec. 144-5, p. 246.

To examine and settle accounts.

He shall examine and settle the accounts of persons indebted to the state and certify the amounts to the Treasurer.

Wis. Stats., sec. 144-8, p. 246.

IN CONNECTION WITH VARIOUS BOARDS AND OFFICERS.

Attorney General.

Damages and costs.

He shall audit damages and costs when supreme court clerk gives him a transcript of judgment against the state.

Wis. Stats., sec. 3203, p. 2207.

Costs and disbursements.

He shall audit costs and disbursements where actions were had against corporations, when certified to by the Attorney General.

Wis. Stats., sec. 3248, p. 2223.

Academy of Sciences, Arts and Letters.

He may authorize the state printer to bind in suitable binding all periodicals of the Academy of Sciences, Arts and Letters.

Ch. 186, L. 1901.

Bank Examiner.*Compiling bank statements.*

He is authorized to draw a warrant for the payment of not exceeding \$200 annually to whomever the Treasurer shall select for compiling bank statements, showing condition of state and private banks.

Ch. 347, L. 1899, p. 636.

Expenses of Examiner.

He shall audit the expenses of the Bank Examiner in carrying out the provisions of this section.

Wis. Stats., sec. 2014-26, p. 1517.

Board of Control.*Expenses.*

He shall audit the accounts of the Board of Control for actual necessary expenses.

Wis. Stats., sec. 561c, p. 407.

Warrants.

He shall draw his warrant in connection with expenditure authorized by authority to create indebtedness when the provisions of this section are complied with.

He shall, as auditor, draw warrants on the treasury in favor of each claimant and deliver same to the secretary of the Board of Control.

Wis. Stats., sec. 561i, p. 409.

List of bills to be certified by him.

Bills incurred by the Board of Control shall be audited by it and a list of such bills as allowed, containing the names of the persons in whose favor they are allowed, the purpose and institution for which they were incurred shall be certified by the president or secretary of the Board and filed with the Secretary of State once a month.

Wis. Stats., sec. 561o, p. 412.

Crediting counties amounts due.

He shall credit the amount due counties to each county, certified to by the Board of Control.

Wis. Stats., sec. 604e, p. 440.

He shall credit the county in whose asylum insane persons are cared, \$3 per week for each and amount expended for clothing. One-half of the said \$3 and amount spent for clothing shall be charged by him to county from which insane were sent, after certificate is approved by the Board of Control, as herein provided.

Wis. Stats., sec. 604f, p. 441.

Charging counties amount due.

He shall charge counties with amounts due the institutions named therein, shown by certified statement from Board of Control, and credit each institution and certify the amount to the treasurer.

Wis. Stats., sec. 561e, p. 408.

Warrants amount due counties.

He shall draw his warrant for amount due counties under this law, and deliver it to the State Treasurer, who shall credit the same to counties entitled.

Ch. 271, L. 1899, p. 469.

Warrants in favor of warden of prison.

He shall draw his warrant in favor of the warden of prison, payable when money is received from the United States for account provided for in section 4932.

Wis. Stats., sec. 4933, p. 2883.

Auditing steward's accounts, school for blind.

He shall audit the accounts of stewards of school for the blind for expenses of indigent pupils after the Board of Control shall have approved.

Wis. Stats., sec. 569, p. 417.

Board of Arbitration and Conciliation.*Witness fees.*

He shall draw his warrant in favor of witnesses for fees, to be the same as circuit court allows, for attendance and travel in connection with proceedings before State Board of Arbitration and Conciliation, when properly certified to and approved by the Board.

Wis. Stats., sec. 1729g, p. 1250.

Expenses of members.

He shall audit accounts for expenses of members of Board of Arbitration and Conciliation, and \$5 per day each for every day actually and necessarily occupied therein.

Wis. Stats., sec. 1729h, p. 1250.

Board of Canvassers.*Accounts for service and attendance.*

He shall audit account for service and attendance of members of Board of Canvassers, when such members are appointed by Chief Justice of the state, as provided under this section, and shall draw a warrant for the payment of \$15 per day, which such officer or judge shall be entitled to receive for such attendance and service.

Wis. Stats., sec. 93, p. 217.

Supreme Court.

All appointments and compensation fixed shall be certified to the Secretary of State by the Chief Justice, and paid on warrants drawn by the Secretary of State.

Circuit Court Reporters.*Deficiency in compensation.*

On certificate of circuit court judge showing a deficiency in compensation of circuit court reporter from counties amounting to \$2,000 annually, he shall issue a warrant for such deficiency.

Wis. Stats., sec. 2438, p. 1756.

Commissioners of Public Lands.*Accounts for expenses.*

He shall audit, after the approval of the Commissioners of Public Lands, accounts for expenses connected with securing and selecting public land.

Wis. Stats., sec. 186, p. 269.

Refunds.

He shall issue a warrant for the re-payment from the proper fund in case the Commissioners of Public Lands certify that erroneous and excessive payments for land have been made.

Wis. Stats., sec. 218, p. 277.

Certificates of indebtedness.

He shall draw his warrant for amount of certificates of indebtedness as provided in this section.

Wis. Stats., sec. 258c, p. 292.

Expenses Forest Warden.

He shall audit accounts for expenses of State Forest Warden and deputy when allowed by the Commissioners of Public Lands and approved by the Governor.

Wis. Stats., sec. 1636c, p. 1186.

Dairy and Food Commissioner.*Salary and expenses.*

He shall audit salary and expenses of inspection agent, after having certified to by the Dairy and Food Commissioner.

Wis. Stats., sec. 1410, p. 1068.

Expense of analyses.

He shall audit accounts for making analyses, for which Dairy and Food Commissioner is authorized to create indebtedness up to \$600.

Wis. Stats., sec. 1410d, p. 1060.

Fish and Game Warden.*Expenses and disbursements.*

He shall audit expenses and disbursements of the Fish and Game Warden upon vouchers therefor approved by the Governor.

Wis. Stats., sec. 1498, p. 1110.

The actual expenses of the Deputy Fish and Game Wardens shall be paid for per diem upon vouchers approved by the Governor.

Wis. Stats., sec. 1498d, p. 1111.

Free Library Commission.*Expressage, drayage and telegraphing.*

He shall audit the duly certified bills of the Free Library Commission for expressage, drayage and telegraphing.

Wis. Stats., sec. 373b, p. 326.

Insurance Commissioner.*Expenses.*

He shall audit the expenses of the Insurance Commissioner in connection with the meeting of the National Insurance Commissioners.

Wis. Stats., sec. 1972a, p. 1486.

The necessary expenses of the Commissioner of Insurance and the Attorney General incurred in enforcing requirements or prosecuting violations of insurance law shall be paid on being certified to the Secretary of State that they were actually and necessarily incurred for purpose stated.

Wis. Stats., sec. 1956k, p. 1465.

This act outlines the duty of the Secretary of State as auditor in connection with the Commission of the Interstate Park.

Ch. 305, L. 1901.

Pan-American.

Secretary of State shall audit the expenses of the Board of Pan-American Exposition and draw his warrant for the payment of the same upon the State Treasurer, if the Governor approves.

Ch. 318, L. 1899.

Railroad Commissioner.***Expenses.***

He shall audit expenses incurred by the Railroad Commissioner and his deputy in performance of duties.

Railroad Commissioner shall have experts to assist in examining bridges, expense not to exceed \$800 per year.

Wis. Stats., sec. 1797, p. 1323, amended by ch. 321, L. 1899.

Superintendent of Public Property.***Gas and electric light accounts.***

He shall audit accounts for gas and electricity upon proper certificate of the Superintendent of Public Property.

Wis. Stats., sec. 148, p. 248.

State Historical Society.***Binding, etc., expense.***

He shall audit the accounts for binding, etc., for State Historical Society.

Wis. Stats., sec. 375, p. 327.

See also laws affecting this Society and Cr. 433, L. 1901, ante, p. 368.

This act authorizes the Secretary of State to audit the claim of the Stevens Point Fair Association for state aid for the year 1900, and to audit the claim of said Association each year hereafter.

Ch. 270, L. 1901.

La Crosse State Fair Association and Northern Wisconsin State Fair.

Warrant authorized to be drawn.

He shall, during the first 10 days in February, draw his warrant in favor of the Treasurer of the Northern Wisconsin State Fair for appropriation herein made and 10% of amount of premiums actually paid at the last fair, upon presentation of sworn statement of officers that the organization, at its last fair, prohibited gambling and intoxicating liquors.

In computing amount on which premium percentage is to be paid there shall not be more than \$1,000 for races, and no other agricultural society in Chippewa County shall receive any aid from the state.

Wis. Stats., sec. 1458d, p. 1088, and ch. 337, L. 1901.

Normal School Regents.

Warrant authorized to be drawn.

He shall draw his warrant in favor of the Treasurer of the Board of Normal School Regents for one-half of the amount actually expended in conducting teachers' institute, upon proper certificate of officers of said Board, as herein provided.

Wis. Stats., sec. 408, p. 340, amended by ch. 179, L. 1899.

Provides that the Secretary of State should draw warrants for accounts allowed.

Ch. 116, L. 1866, pp. 3, 5.

Accounts for purchase and transfer of books.

He shall audit accounts for purchases of books by trustees of State Library, upon affidavits of State Librarian that books have been received, and upon approval by majority of trustees.

Wis. Stats., sec. 371, p. 325.

He shall fix the account of the State Librarian for expense of transporting books.

Wis. Stats., secs. 372-7, p. 325.

St. Louis World's Fair Commissioners.

He shall audit the receipts and expenditures of the State Board of Commissioners for the St. Louis World's Fair.

Ch. 297, L. 1901.

State Veterinarian.

Accounts for experimental expenditures.

He shall audit, upon presentation of verified account and itemized statement approved by the Governor, the account of the State Veterinarian for sums expended within \$500, annually, for experimental purposes.

Accounts for services consulting veterinarians.

Upon itemized vouchers certified to by the State Veterinarian and approved by the Governor, he shall audit the accounts for services of consulting veterinary surgeons at \$7 per day and necessary expenses.

Wis. Stats., sec. 1492e, p. 1103.

State Superintendent.

County training schools.

He shall draw his warrant for one-half amount actually expended by counties for maintaining training school for teachers on receipt of certificate of State Superintendent provided for by this section, and the amount of such state aid is limited to \$2,500 in any one year, and if more is demanded counties shall be paid proportionately.

Ch. 268, L. 1899, p. 454.

Manual training in high schools.

He shall draw his warrant for \$250, payable to treasurer of district or corporation, provided that there shall be no more than 10 schools receiving such aid, and that the total expenditure shall not exceed \$2,500, upon receiving certificate from the State Superintendent that manual training department has been maintained six months during the year.

Wis. Stats., sec. 496c, p. 389.

Apportionment of school fund income.

He shall draw his warrant for total amount of school fund income apportioned each county, upon receiving apportionment from the State Superintendent.

Upon satisfactory evidence and facts certified to Secretary of State, he shall draw his warrant for apportionment on any ground mentioned in section 554, in case any town, village, city or district was excluded from participating in apportionment.

Wis. Stats., secs. 555, 556, p. 404.

University.

Expenses and compensation of agent of Experiment Station.

He shall audit the expenses and compensation of the agent of the director of the Agricultural Experiment Station of the U. W., for which \$300 are annually appropriated.

Ch. 180, L. 1899, p. 263.

Wisconsin National Guard.

Inspecting officer.

He shall draw his warrant on order of the Governor, certified to by the Adjutant General for compensation of the inspecting officer of the Wisconsin National Guard of \$600, annually.

Wis. Stats., sec. 632, p. 456.

Costs and expenses of defending members.

He shall audit the costs and expenses of defending the members of the Wisconsin National Guard when prosecuted for any act performed in connection with military duty, when defense is directed by the Governor upon recommendation of the Attorney General.

Wis. Stats., sec. 649c, p. 462.

He shall, with the assistance of the Adjutant General, prepare blanks and instructions for enrollment of those liable to military duty when census is taken.

Ch. 228, sec. 8, L. 1901.

TO BE FILED IN OFFICE OF SECRETARY OF STATE AS AUDITOR.

Affidavits of accounts rendered.

Wis. Stats., sec. 145, p. 247.

Statements of all persons receiving money or property of the state or having management of property of which an account is kept in his office.

Wis. Stats., sec. 149, p. 248.

Samples of paper submitted by contractors.

Wis. Stats., sec. 312, p. 307.

Certificates of officers of Board of Normal School Regents as to Teachers' Institutes.

Wis. Stats., sec. 408, p. 340, amended by ch. 179, L. 1899.

Lists of bills certified to by Board of Control officers.

Wis. Stats., sec. 561o, p. 408.

Certificates of president and secretary of school board and superintendent of schools as to deaf-mute instruction, to be approved by State Superintendent and President of Board of Control.

Wis. Stats., sec. 579, p. 426.

Sworn statements of officers of State Agricultural Society, and he shall thereupon issue his warrant for the amount paid by the Board.

Wis. Stats., sec. 1458c, p. 1068.

Sworn statements of officers of Northern Wisconsin State Fair and he shall thereupon issue his warrant for the amount paid by the Board.

Wis. Stats., sec. 1458d, p. 1088.

Oaths and certificates of county clerks as to scalps of animals killed.

Wis. Stats., sec. 1629, p. 1181, amended by ch. 45, L. 1899.

Certificates of circuit court judges as to deficiency of reporter's compensation.

Wis. Stats., sec. 2438, p. 1755.

Certificate of Attorney General as to costs and disbursements.

Wis. Stats., sec. 3203, p. 2267.

The disbursements of the Secretary of State's office cover also the expense of Auditor.

STATE TREASURER.

The State Treasurer, a constitutional elective officer, has charge of all state money and is under bond for the faithful performance of his duties. He is required to pay out money only on warrant of the Secretary of State as Auditor and in pursuance of law authorizing the payment and give receipts countersigned by the Secretary of State for all payments to him. He is also one of the Commissioners of Public Lands, also of the Boards, committees and commissions shown on page 458, post.

Chapter 433 of the laws of 1901 relating to the central system of accounting, declares the Legislative intent as to all state officers, agents and all institutions, departments, societies, Boards and commissions, including the University and Normal Schools supported by the state and employees thereof.

The effect of the complete adoption of the system provided in that act will be that all money collected by any person for or on behalf of the state will be paid direct and promptly into the state treasury accompanied by a proper statement. See page 368, ante.

STATE TREASURER.

Election and term.

He shall be chosen at the general election for a term of two years, commencing the first Monday in January next succeeding his election.

Const., art. 6, sec. 1, p. 100.

Wis. Stats., sec. 128, p. 240.

Duties in general.

He shall perform duties imposed on him by law.

Wis. Stats., sec. 157-153, p. 251.

Compensation.

His salary is \$5,000 annually.

Wis. Stats., sec. 170, p. 259.

Oath—Bond.

To take constitutional oath and give bond with not less than six sureties (free-holders) that he will deliver up the money, books, records, etc., and faithful performance, etc., including also faithful discharge of duties as commissioner of public lands.

His bond, \$100,000, must be approved by the Governor.

Oath and bond shall be filed in the executive office.

Wis. Stats., sec. 153 p. 249.

Bond, additional.

He shall give an additional bond if the Governor requires it.

Wis. Stats., sec. 154, p. 249.

Office—State money.

He shall keep his office in the capitol, have charge of all money paid into the treasury, and shall pay out the same as required by law.

Wis. Stats., sec. 152, p. 249.

Books, records, etc.

He shall deliver to his successor all books, records, etc., belonging to the office.

Wis. Stats., sec. 157-6, p. 250.

Assistant Treasurer.

He may appoint an Assistant Treasurer at \$2,000, annually, who shall give a bond to the Treasurer and perform all duties assigned him by the Treasurer.

Wis. Stats., sec. 155, p. 250.

Clerks.

He may employ clerks as follows and file appointment in writing with the Secretary of State:

Wis. Stats., sec. 156, p. 250.

A book-keeper at \$1,800, annually.

Assistant book-keeper at \$1,800, annually.

Corresponding clerk at \$1,600, annually.

Mailing clerk at \$1,200, annually.

Commercial clerk at \$1,200, annually.

Deposit clerk at \$1,400, annually.

A stenographer at \$720, annually.

A watchman at \$744, annually.

Wis. Stats., sec. 170, pp. 259, 260.

Compiling bank statements.

\$200 annually allowed for compiling statement of condition of private and state banks.

Ch. 347, L. 1899.

Accounts.

The Treasurer shall keep fair, full and separate accounts of money received, distinguishing the several funds, and a cash book in which shall be entered in detail money received and disbursed.

Wis. Stats., sec. 157, p. 250.

Examination of accounts.

An examination of books, records and accounts of treasury shall be made at least once each quarter by the Governor and Attorney General. Deficiency, if any, to be made up.

Wis. Stats., sec. 159, p. 252.

Weekly transcript of accounts.

At the end of each week to give the Secretary of State a transcript of his accounts for the previous week as herein provided.

Wis. Stats., sec. 157-1, p. 250.

Interest account.

He shall pay into the treasury and account for all sums received directly or indirectly, including interests on deposits.

Wis. Stats., sec. 157-12, p. 251.

Appropriation of money.

No money shall be paid out except it is appropriated by law and no appropriation shall be made, except claims of the United States and judgments, unless filed within six years after claim accrued.

Const., art. 8, sec. 2, p. 113.

Warrants.

The Treasury shall pay out of the treasury upon warrants of the Secretary of State all sums audited by law if there be appropriated sums to pay the same, and when any sum is required to be paid out of any fund it shall be paid out of such fund only.

Wis. Stats., sec. 157-2, p. 250.

He shall pay no money out except in pursuance of a law authorizing the payment, and shall in no case pay any money from the treasury or have any credit for any money paid therefrom except on the warrants of the Secretary of State and upon each such warrant he shall take the receipt endorsed on (or annexed) of the payee.

Wis. Stats., sec. 146, p. 248.

Fiscal laws.

He shall be furnished by the Secretary of State with a copy of fiscal laws.

Wis. Stats., sec. 141-7, p. 245.

Order of payment.

He shall make payments in order they are presented, giving no preference.

Wis. Stats., sec. 157-3, p. 250.

Receipts.

He shall give receipts for all money, which before delivery must be countersigned by the Secretary of State.

(Not evidence of payment unless so countersigned.)

Wis. Stats., sec. 157-4, p. 250.

Inspection of books, etc.

He shall permit books, papers and transactions of his office to be open at all times to the inspection of the Governor, Secretary of State, Attorney General, the Legislature or any committee thereof.

Wis. Stats., sec. 157-5, p. 250.

Reports.

Requirements as to his reports to the Governor. (Quarterly and biennial.)

Wis. Stats., secs. 157-7, 157-8, p. 251.

Provides for an additional report.

Ch. 97, L. 1901.

Condensed financial statement.

The Treasurer and Secretary of State shall make in addition to their biennial reports, at the close of each odd-numbered fiscal year, a condensed statement of the finances of the state and cause the same to be published in the official state paper and one other Wisconsin newspaper of different political party from the official paper.

Wis. Stats., sec. 335a, p. 314.

Certified copies.

He shall make a certified copy of any paper filed in his office and transcripts of books and records kept therein when required and shall receive therefor 12 cents per folio and 25 cents per certificate.

Wis. Stats., sec. 157-9, p. 251.

Statement of fees.

He shall keep a detailed statement of fees, including his fees as Commissioner of Public Lands, received by him and pay same into the general fund of the treasury.

Wis. Stats., sec. 157-10, p. 251.

Payments to counties.

He shall furnish each county clerk, between October 10 and November 1 each year, a statement of all money paid by him to the Treasurer of such county for the year ending September 30.

Wis. Stats., sec. 157-11, p. 251.

Fiscal year.

All books shall be kept with reference to beginning and closing of fiscal year which is July 1 to June 30.

Wis. Stats., sec. 158, p. 252, amended by ch. 400, L. 1901.

Depository bonds.

Every state depository shall file with the State Treasurer a bond with at least 5 sureties, conditioned for payment free of exchange with such interest as may be fixed.

Wis. Stats., sec. 160b, p. 253.

Deposits.

He may deposit to the limit fixed by the Board of Deposits in any depository complying with the requirements of law and such deposits shall be deemed to be in the treasury.

Wis. Stats., sec. 160d, p. 253.

He shall withdraw money from banks whose designation as depository is revoked.

Wis. Stats., sec. 160e, p. 254.

Apportionment to funds.

The total interest paid by depositories shall be apportioned by the Treasurer and become part of the following funds: General, School, School Income, University, University Income, Normal School, Normal School Income, Agricultural College, Agricultural College Income, according to the average amount of each such fund on hand the first day of each month.

Wis. Stats., sec. 160f, p. 254, amended by ch. 346, L. 1901.

Postage and stationery.

He may procure postage stamps and stamped envelopes which shall be paid for out of the treasury (for official correspondence of his office.)

Wis. Stats., sec. 163, p. 258.

He or his Assistant may draw stationery for his office from Superintendent of Public Property.

Wis. Stats., sec. 290, p. 301.

Notary public fees.

Applicants for notary public commissions shall pay into the treasury, \$2.

Wis. Stats., sec. 174, p. 264.

Salaries, how paid.

Provides that all salaries of officers and employes shall be paid at the end of each month for previous month except supreme and circuit court judges, who shall be paid quarterly in advance.

Wis. Stats., sec. 171, p. 263.

Payments for land.

Provides that when payment for land is made to the Treasurer, if it is the result of private sale, the purchaser shall produce memoranda as per section 212. He shall give receipt to such purchaser.

(See Commissioners of Public Lands as to the certificate.)

Wis. Stats., sec. 213, p. 276.

The money for public lands sold shall be paid to him and he shall credit the proper fund. The Secretary of State shall upon countersigning the receipt charge the Treasurer therewith.

Wis. Stats., sec. 216, p. 277.

Provision as to.

Money received from sale of property, seized under provision of chapter 16, Wisconsin statutes.

Wis. Stats., sec. 245, p. 286.

Resale and redemption of land.

Provides the duties of the Treasurer in connection with the resale and redemption of lands.

Wis. Stats., sec. 223, p. 281.

Fees for advertising lands.

Prices which shall be paid each newspaper for advertising sale of lands.

Wis. Stats., sec. 237, p. 284.

Commissioners of public lands.

The Treasurer in connection with the Secretary of State and Attorney General, shall constitute a Board of Commissioners for

the sale of the school and university lands and for the disposition of all public lands and they shall control the investment of the funds arising therefrom.

Const., art. 10, sec. 7, p. 120.

Wis. Stats., sec. 185, p. 269.

Whenever said commissioners shall purchase any bonds of this state the Governor, Secretary of State and State Treasurer shall execute in duplicate a certificate of indebtedness to the proper fund for the amount thereof used in such purchase and shall deposit one such duplicate in the office of the Treasurer and one in the office of the Secretary of State.

Wis. Stats., sec. 259, p. 294.

All satisfactory proofs of sales of public lands sold at auction to the highest bidder shall be deposited with the State Treasurer.

Wis. Stats., sec. 228, p. 281.

School fund.

Money paid into the treasury on account of capital of school fund shall be and remain a separate and perpetual fund.

Wis. Stats., sec. 246, p. 287.

Apportionment of school moneys.

The State Superintendent shall certify the apportionment made of school moneys to the Secretary of State and State Treasurer.

Wis. Stats., sec. 1072, p. 827.

University fund.

All money paid into the treasury on account of University fund shall remain a separate and perpetual fund.

Wis. Stats., sec. 248, p. 287.

Agricultural College fund.

All money paid into the state treasury on account of the sales of Agricultural College lands shall be a separate and perpetual fund.

Wis. Stats., sec. 249, p. 287.

Normal School fund.

All swamp-lands and money in lieu thereof from the U. S., and all moneys received as purchase money for swamp lands having been divided into two equal parts, shall constitute two separate funds, Normal School fund and Drainage fund.

Wis. Stats., sec. 250, p. 288.

Swamp land fund.

The treasurer shall pay counties on proper warrants amounts due them from swamp land fund.

Wis. Stats., sec. 251a, p. 288.

Provides for date of interest payments from trust fund loans.

Ch. 72, L. 1901.

Provision is made in this section as to receipts from Marathon county lands.

Wis. Stats., sec. 252, p. 289.

Provides as to receipts from Jackson county.

Ch. 391, L. 1901.

Certificate of indebtedness.

Relates to paying apportionment of interest on certificates of indebtedness.

Wis. Stats., sec. 260, p. 294.

Payments of taxes from counties.

County treasurers shall pay to the State Treasurer the amount of state taxes charged to their respective counties on or before the third Monday in February.

Wis. Stats., sec. 1121, p. 849, amended by ch. 335, L. 1899, sec. 8.

Procedure when State Treasurer is made to collect taxes within time prescribed by law.

Wis. Stats., sec. 112, p. 845, amended by ch. 308, L. 1899.

Provides an additional penalty of 20 per cent. of amount withheld.

Wis. Stats., sec. 1122, p. 849.

Penalties upon counties when they fail to pay any part of the state tax levied upon such county at the time and in the manner required by law to the State Treasurer.

Wis. Stats., sec. 1124, p. 849.

Procedure as to delinquent taxes on contract lands or lands mortgaged to the state.

Wis. Stats., sec. 1145 47, p. 861; see sec. 1149, p. 862.

Treasurer shall allow county treasurers amount of state tax illegally collected in the next settlement between them.

Wis. Stats., sec. 1164, p. 866.

Railroad tax for destruction of weeds.

Provides for collecting from railroad companies for destruction of weeds that the amount so collected shall be returned to the municipality from which certificate was received.

Wis. Stats., sec. 1480b, p. 1097.

Railroad license.

Every railroad company, except horse power, shall make returns to Treasurer on blanks furnished by him a true statement of gross earnings, as herein provided.

The railroad company shall pay a fee as herein provided and receive from the State Treasurer a license for calendar year commencing Jan. 1, previous to such application. License shall be delivered if Railroad Commission approves.

Wis. Stats., sec. 1211, p. 922; sec. 1212, p. 922, amended by ch. 208, L. 1899.

This section provides what annual license fee for operation of railroad shall be.

\$5 per mile, where earnings are less than \$1,500 per mile.

2 per cent. on gross earnings where railroads are operated on pile and pontoon or pontoon bridges, one-half of fees payable when license issues and balance Aug. 10, each year.

Wis. Stats., sec. 1213, p. 922.

Telegraph companies' license.

Details of report to be made by telegraph companies.

When report conforms to this section, State Treasurer shall issue license conditioned upon the prompt payment of legal fee to Treasurer on or before June 1, each year.

The basis of computing the fee per mile. (See sec. 1222a below.)

Wis. Stats., sec. 1216, p. 923.

Telephone companies' licenses.

Contains special provision for telephone companies whose lines are wholly in the state where certain limited rates are charged.

Wis. Stats., sec. 1222a, p. 926.

Upon failure of owners to pay, the Treasurer shall advertise such lines in official paper and shall sell such lines to secure unpaid fee.

Wis. Stats., sec. 1217, p. 924.

Penalty of such companies to make returns,

Wis. Stats., sec. 1218, p. 925.

Telephone companies shall return to State Treasurer on blanks furnished by him, a true statement of gross receipts each year and on returning such statement shall apply for a license and pay legal fee and receive license to transact business until Sept. 31 of that year.

Certain telegraph companies on same basis, see above.

Such annual license fee shall be computed on the gross receipts of the business. If the amount be over \$100,000, 3 per cent. If under \$100,000 2 1-4 per cent.

Wis. Stats., sec. 1222a, p. 926.

Street Railway and Electric Light companies.

A statement of the gross cash receipts of street railway and electric light companies shall be made the first Monday in December to treasurer of municipality where company is domiciled. Fee is from 2 to 4 per cent.

Wis. Stats., sec. 1222c, p. 927; sec. 1222d, p. 928.

The county treasurer shall pay on or before April 1 each year to the State Treasurer two-thirds of the amount received by him from each municipality in his county to be applied as a state tax and in lieu thereof.

Wis. Stats., sec. 1222e, p. 928, amended by ch. 354, L. 1899.

Dam and boom companies.

Dam and boom companies shall, as herein provided, return to the Treasurer, upon his blanks, a true statement of receipts and disbursements, gross and net earnings showing local taxes levied or assessed for the year.

Wis. Stats., sec. 1222g, p. 929.

Each such owner on returning such report to pay a fee of 2 per cent. of gross earnings.

Wis. Stats., sec. 1222i, p. 930.

Title companies.

License fees.

Wis. Stats., sec. 1222 l, p. 930.

Plank and toll roads.

Plank and toll roads, 3 per cent. of gross receipts.

Provides for statement of gross receipts.

Penalty for failure, \$500.

Wis. Stats., sec. 1222m, p. 930.

Trust companies.

Trust companies shall pay \$300 and 2 per cent. of net income. These payments to be in lieu of taxes except upon real estate.

Wis. Stats., sec. 1222k, p. 930.

Such companies shall deposit with the Treasurer securities as herein provided.

Wis. Stats., sec. 1791e, p. 1316.

Such companies shall pay license fees to Treasurer in lieu of taxes except on real estate.

Wis. Stats., sec. 1791i, p. 1318.

Peddlers' license.

Every peddler, before he shall be entitled to a license, shall pay into the state treasury the license fees herein provided.

Wis. Stats., sec. 1572, p. 1156, amended by ch. 341, L. 1901.

Patent-right license.

Every patent-right dealer, before he shall be entitled to a license, shall pay into the state treasury the license fees herein provided.

Wis. Stats., sec. 1573, p. 1156.

Every owner, manager or agent of a caravan, circus or menagerie before he shall be allowed to exhibit the same in this state shall procure a state license and shall pay into the state treasury therefor the sum of \$100.

Wis. Stats., sec. 1574, p. 1157, amended by ch. 341, L. 1901.

There shall be audited and paid out of the state treasury to the Treasury Agent the sum of 25 per cent. of the amount which the Treasury Agent may cause to be collected and paid into the state treasury as fees for licenses.

Wis. Stats., sec. 1582, p. 1159.

State licenses for bankrupt sales.

Persons selling bankrupt stocks, insolvent or closing out sales, etc., shall obtain a license.

Wis. Stats., sec. 1584d, p. 1160.

Applications for state license under preceding section shall be made to the State Treasurer, and license issued by him what application must contain.

Files and records of State Treasurer shall be convenient in form and open for public inspection.

Wis. Stats., p. 1584e, p. 1160.

Upon proper application and receipt of \$100 fee, the State Treasurer shall issue license.

Details of license.

Wis. Stats., sec. 1584f, p. 1161.

Express companies.

Procedure to tax property of.

Ch. 111, L. 1899.

Sleeping car companies.

Procedure as to tax of.

Ch. 112, L. 1899.

Freight line companies.

Procedure as to tax of.

Ch. 113, L. 1899.

Equipment companies.

Procedure as to tax of.

Ch. 114, L. 1899.

Inheritance tax.

Procedure as to collection of tax.

Ch. 335, L. 1899, p. 17.

Funds from public administrator.

The duty of the State Treasurer on receipt of funds from public administrator.

Wis. Stats., sec. 3820, p. 2438.

W. N. G.

The Quartermaster General is authorized to draw funds not to exceed \$500 at any one time from the state treasury for the payment of labor at the Wisconsin military reservation, giving his personal receipt therefor and filing proper vouchers within 60 days thereafter.

Ch. 228, L. 1901.

Note.—This section would appear to be entirely inconsistent with if not repealed by chapter 8, laws of 1901.

This act makes provision as to the payment of troops in camp and should be considered in connection with chapter 433, laws of 1901.

Ch. 228, L. 1901.

The Fish and Game Wardens shall pay to the State Treasurer the proceeds of any fish or game caught, killed or taken in violation of any law, sold at public auction less the expense of such sale.

Wis. Stats., sec. 1498c, p. 1111.

All fees for licenses issued for hunting deer shall be paid to the Secretary of State previous to the issuing thereof who shall pay the same to the State Treasurer.

Wis. Stats., sec. 1498p, p. 1115.

Board of Canvassers.

The Treasurer with the Secretary of State and Attorney General shall constitute the Board of State Canvassers.

Whenever the chief justice shall designate any state officer or judge to act as one of the board, such officer or judge shall be entitled to receive a compensation and the Secretary of State shall audit his account for the same and draw a warrant on the State Treasurer for payment thereof. See also section 87, page 215.

Wis. Stats., sec. 93, p. 217.

Board to examine unused state chattel property.

The Governor, Secretary of State and State Treasurer are hereby constituted a board to examine any chattel property of the state in the hands of the Superintendent which is not in use at any time and direct it to be sold or otherwise disposed of in such manner as the board may deem for the best interest of the state.

The Superintendent shall pay to the Treasurer proceeds of all such sales.

Wis. Stats., sec. 294, p. 302.

Commissioners of Printing.

The Secretary of State, State Treasurer and Attorney General are commissioners of the public printing.

Wis. Stats., sec. 296, p. 303.

Deposit required with printing bid.

Each bidder for public printing shall deposit with the State Treasurer, before making his proposals, the sum of \$1,000 to be forfeited in case he shall not make a contract according to his proposals, if accepted, and according to the requirements of this chapter, and shall take a receipt of said Treasurer and deposit the same with his proposals.

Wis. Stats., sec. 347c, p. 319.

Railroad Commissioner's Report to Treasurer.

It is provided in this section what this report must embrace.

Wis. Stats., sec. 1795, p. 1322.

Treasurer Board of Agriculture.

The State Treasurer is ex-officio treasurer of the State board of Agriculture.

Wis. Stats., sec. 1458, p. 1087.

Whatever money shall be appropriated or otherwise received by said board for the department of agriculture shall be paid to the State Treasurer and be disbursed by him on orders signed by the president and secretary of the board, for such purposes as will best promote the interests committed to their charge.

Wis. Stats., sec. 1458b, p. 1068.

Treasurer University Regents.

The State Treasurer shall be the treasurer of the Board of Regents of the University and shall perform all duties of such office.

Wis. Stats., sec. 379, p. 330.

Accounts for the expenses of the Board of Regents incurred in the performance of any duty in pursuance of any direction of the board, shall be paid by the treasurer on the order of the board out of the University Fund income.

Wis. Stats., sec. 392, p. 335.

Commercial fertilizers.

All moneys received by the director of the experiment station shall be paid into the treasury of said station.

Evidently the intent was to have the money paid into the State Treasury.

Wis. Stats., sec. 1494d, p. 1106.

Receipts of Experiment Station under Nursery Stock disease act.

The director of the experiment station shall turn over all moneys received by him under this act to the State Treasurer to be credited to the General fund.

Ch. 180, L. 1899.

Wis. Stats., sec. 8, p. 266; secs. 9, 10.

The State Treasurer is ex-officio treasurer of the Normal School Regents.

Wis. Stats., sec. 395, p. 337.

All moneys actually and necessarily expended by any member of the Board of Normal Regents shall be paid from the Normal School Fund income in the state treasury on accounts presented to and adjusted by the board and certificate signed by the secretary and president thereof.

Wis. Stats., sec. 395, p. 337.

Sums donated and subscribed for the erection, etc. of Normal School buildings must be paid into the state treasury before a warrant shall be issued for any part thereof.

Wis. Stats., sec. 401, p. 338.

State Superintendent—Proceeds of dictionaries sold.

The State Superintendent shall pay all money received on account of dictionaries sold to the state treasury.

Wis. Stats., secs. 509, 511, p. 392.

Fees from Commissioner of Insurance.

The Commissioner of Insurance shall make daily payments to the State Treasurer of all fees and taxes received and shall, on the first day of each month, report in detail the receipts of his department during the preceding month to the Governor, Secretary of State and State Treasurer, together with the dates of such payments to the Treasurer.

It shall be the duty of the Governor, Secretary of State and State Treasurer to quarterly examine and audit the books and records of the department of insurance.

Wis. Stats., sec. 1972c, p. 1487.

An Accident Insurance company shall before a license is issued deposit with the State Treasurer a security of not less than \$1,000 to be approved by the Commissioner of Insurance.

Ch. 442, L. 1901.

The State Treasurer shall prepare suitable stamps, seals, marks and brands in connection with the inspection of oils and shall make rules and regulations for the issuing, affixing and cancelling of said stamps, etc.

Ch. 466, L. 1901.

He shall number the districts and the appointment of the deputy inspectors shall be filed with him after having been approved by the Governor.

NOTE:—This account should be consulted for details of treasurer's duty in connection with the superintendent and deputy inspectors.

He shall place all fees received in a special fund to be devoted to the payment of the salaries of the inspector and deputies.

Apportioning funds in the treasury.

In connection with the Governor and Secretary of State he may apply the surplus in the treasury or as much as they deem proper as a portion of tax levy.

Wis. Stats., sec. 1069a, p. 827.

Aid to New Richmond.

He shall transfer to the Trust fund from the General fund \$21,500 appropriated by this act and trust fund commissioners shall cancel and file amount of the indebtedness of New Richmond to said trust fund.

Ch. 286, L. 1901.

BOARDS OF WHICH HE IS A MEMBER.

Ex-officio member of the executive committee of the Historical Society.

Wis. Stats., sec. 374, p. 327.

Board to examine unused state chattel property.

Wis. Stats., sec. 294, p. 302.

Commissioners of Public Lands.

Wis. Stats., sec. 185, p. 269.

Commissioners of Public Printing.

Wis. Stats., sec. 296, p. 303.

Board of State Canvassers.

Wis. Stats., sec. 93, p. 217.

Board of Deposits.

Wis. Stats., sec. 160a, p. 253.

BOARDS OF WHICH THE STATE TREASURER IS TREASURER EX-OFFICIO.

University regents.

Wis. Stats., sec. 379, p. 330.

Normal School regents.

Wis. Stats., sec. 395, p. 337.

State Board of Agriculture.

Wis. Stats., sec. 1458, p. 1087.

DISBURSEMENTS ON ACCOUNT OF THE TREASURY DEPARTMENT

For the year ending Sept. 30, 1900.

Salaries of ten (10) officials and employees	\$17,464 00
Printing and publishing, including cost of paper and waste, per report	
Commissioners of Printing	538 80
Postage and P. O. box rent	354 44
Stationery, per report Superintendent Public Property	118 97
Compling bank statement	200 60
Sundry Items	102 03
Total	<u>\$18,778 24</u>

Pages 157, 488 and 500 in the report of the Secretary of State for the year ending Sept. 30, 1900.

ATTORNEY GENERAL.

This is a constitutional state officer chosen biennially at the general election. He receives a salary of \$3,000 per year and is reimbursed his actual and necessary expenses incurred while on duty.

The compilation of laws which follow clearly outline his duties, powers and privileges:

ATTORNEY GENERAL.

Election and term.

He shall be chosen biennially at the general election in the even-numbered year. His term of office shall be two years.

Wis. Stats., sec. 128, p. 240.

Oath and bond.

He shall take the constitutional oath and give bond, approved by the Governor, for \$10,000 within 20 days after receiving notice of his election and before entering upon his duties also additional bond if required by the Legislature or by the Governor.

Wis. Stats., sec. 161, p. 254.

Salary.

His salary is \$3,000 including his services as Commissioner of Public Lands; also expenses necessarily incurred in traveling.

Wis. Stats., sec. 170, p. 260.

This act provides conditions under which the Secretary of State as auditor may approve vouchers for transportation.

Ch. 426, L. 1901.

Assistants, clerks, messengers, etc.

He may appoint assistants as follows:

An assistant attorney general at \$2,000 annually and expenses necessarily incurred in traveling.

A second assistant attorney general at \$1,800, annually.

A law examiner at \$1,500, annually.

A clerk at \$1,000, annually.

A stenographer at \$900 annually.

A messenger at \$720, annually.

These appointments and constitutional oaths of the two assistants and the law examiner shall be filed with the Secretary of State.

Wis. Stats., sec. 162, p. 254; sec. 170, p. 260.

Duties in general.

His duties shall be:

1. To prosecute or defend actions in behalf of the state.
2. To prosecute for breach of bonds or contract at the request of the Governor, Secretary of State or State Treasurer.
3. To consult with and advise with the district attorneys.
4. To give written opinions without fee, by Legislature or heads of departments as herein provided to examine applications.
5. To prepare contracts, etc., for departments. To report to the Legislature regarding any business of his office when requested.
6. To pay into treasury all money received by him belonging to the state immediately upon its receipt.
7. To keep in proper books a register of all actions and proceedings had.
8. To deliver to his successors all money, books documents and effects belonging to his office.
9. To file statement of fees received with Secretary of State on or before each September 30 all such fees to be paid monthly into treasury.
10. He shall perform all duties imposed upon him by law.

Wis. Stats., sec. 163, p. 255.

Postage.

He shall be furnished with postage stamps and stamped envelopes for his official correspondence, also stationery and Blue books as herein provided.

Wis. Stats., sec. 163, p. 253; sec. 121, p. 236; sec. 390, p. 301.

Action against Telegraph companies.

Owners of telegraph lines neglecting to pay the license fee shall forfeit \$5,000 for each neglect, which shall be sued for in action in name of the state.

Wis. Stats., sec. 1218, p. 925.

Telephone companies; license; action; forfeiture.

Telephone licenses required by this chapter shall be such in form as shall be approved by the Attorney General.

Telephone companies neglecting to obtain license or pay the fee shall forfeit \$5,000 and the Attorney General shall, upon such neglect collect by action and proceed to have franchises forfeited.

Conditions delinquents may make return of license fees before judgment.

Wis. Stats., sec. 1222a, p. 926.

Palace, sleeping and drawing-room car owners.

Owners of palace, sleeping and drawing room cars may be restrained, at suit of Attorney General, from using such cars or collecting compensation.

Wis. Stats., sec. 1222b, p. 927.

Dam and Boom companies forfeiture of charter for neglect.

Upon neglect of dam and boom companies to obtain licenses and make report, the Attorney General may proceed to have the charters forfeited.

Wis. Stats., sec. 1222j, p. 930.

Plank and toll road owners; license fee, action.

When owners of plank and toll road neglect to make report or pay fee, such owners shall forfeit the sum of \$500 to be sued for and recovered by action in the name of the state.

Wis. Stats., sec. 1222m, p. 930.

Trusts, Pools—Duty of Attorney General.

Whenever the Attorney General shall have reason to believe that trusts, pools and conspiracies exist it shall be his duty to determine whether the law has been violated and proceed against such corporation in accordance with this chapter.

Wis. Stats., sec. 1791k, p. 1319.

Attorney General may have cases printed.

This section provides that the Attorney General may have his cases, arguments and briefs printed by the State Printer.

Wis. Stats., sec. 2414, p. 1741.

This act authorizes the compilation of the opinions of Attorney General from the organization of the government to the present time.

Ch. 161, L. 1901.

Costs, how paid.

The necessary costs and disbursements incurred in bringing and prosecuting actions, as herein provided by the Attorney General, shall, when certified to by him, be paid out of the state treasury.

Receiver of corporation may be compelled to reimburse State Treasurer for such costs and disbursements.

Wis. Stats., sec. 3248, p. 2223.

Judgment roll, where filed.

He shall file judgment roll with the Secretary of State, as herein provided.

Wis. Stats., sec. 5249, p. 2224.

Appropriation for books.

\$200 is annually appropriated for books purchased for the office of the Attorney General.

Ch. 324, L. 1899.

Debts and diversion of funds.

Authority to create indebtedness.

Wis. Stats., sec. 563, p. 414.

IN CONNECTION WITH THE GOVERNOR.

Examination of books.

He shall in connection with the Governor examine and see that all the money appearing by the books of the Secretary of State and State Treasurer as belonging to the several funds, is in the vaults of the treasury or state depositories.

In case of a deficiency the treasurer shall be required to make up such deficiency, and if such treasurer refuse or neglect to do so, the Attorney General shall institute proceedings to recover the same.

Wis. Stats., sec. 159, p. 252.

Examination by Attorney General.

It shall be the duty of the Attorney General to examine corporations when required to do so by the Governor.

Wis. Stats., sec. 1766, p. 1275.

Transfers of moneys.

The Attorney General in connection with the Secretary of State and State Treasurer, with the consent of the Governor, is authorized to transfer trust funds to the general fund.

Ch. 147, L. 1899.

He shall report to the Governor on or before Dec. 10th, each even-numbered year, as herein provided. This report shall be published by the Commissioners of Public Printing in the public documents of the state, and they shall also print 1,000 copies to be bound in cloth, to be distributed, as herein provided.

Ch. 94, L. 1901.

This act provides an additional report to be made to the Governor before Jan. 10, each odd-numbered year.

Ch. 97, L. 1901.

IN CONNECTION WITH THE SECRETARY OF STATE.

Costs, how paid.

The necessary costs and disbursements in bringing and prosecuting actions against corporations shall be audited by the Secretary of State.

Wis. Stats., sec. 3248, p. 2223.

See page 3, section 159.

Ch. 147, L. 1899.

IN CONNECTION WITH THE STATE TREASURER.

Action for forfeiture.

Money recovered in actions brought by the Attorney General for a forfeiture, shall be paid into the treasury.

Wis. Stats., sec. 3300, p. 2236.

IN CONNECTION WITH THE RAILROAD COMMISSIONER.

Neglect to obtain license—Duty of Attorney General.

In case railway companies neglect to obtain licenses and make report, they shall forfeit \$10,000, and the Attorney General shall collect by action and proceed to have forfeiture of franchises declared.

Conditions under which delinquents may make returns prior to judgment.

Wis. Stats., sec. 1214, p. 923.

Violation of law—Proceedings if law violated; expense.

Expenses of Attorney General in connection with the Insurance Commissioner.

Wis. Stats., sec. 1955k, p. 1465; sec. 1972a, p. 1486.

Commissioners of Public Lands.

He shall be one of the Commissioners of Public Lands.

Wis. Stats., sec. 185, p. 269.

Statement of fees.

His fees as Commissioner of Public Lands shall be included in his detailed statements of fees, which he shall file with the Secretary of State each Sept. 30.

Wis. Stats., sec. 162-9, p. 255.

Commissioners of Printing.

He shall be one of the Commissioners of Printing.

Wis. Stats., sec. 296, p. 303.

Manufacturing in the state prison; debt against state.

His consent, in writing, is necessary, in connection with the Governor and Secretary of State, before the State Board of Control can create indebtedness when the appropriation is insufficient or great emergency exists.

Wis. Stats., sec. 5611, p. 490.

State Board of Deposits.

He shall be a member of the State Board of Deposits.

Wis. Stats., sec. 160a, p. 253.

Board to try complaints against railways.

He shall be a member of the Board to hear and try complaints against railway companies.

Ch. 22, L. 1899.

Board of Canvassers.

He shall be a member of the Board of Canvassers.

Wis. Stats., sec. 93, p. 217.

Legislative committees.

He shall appear in person or by his assistant before the committee and give counsel in relation to the liability of the state thereon and act for the state in all things connected therewith.

Wis. Stats., sec. 107, p. 233.

Escheats.

His duty to bring action to protect the state.

Wis. Stats., sec. 233, p. 298.

State officers may require searches, etc., without fees.

Wis. Stats., sec. 2963, p. 2075.

DISBURSEMENTS IN THE DEPARTMENT OF THE ATTORNEY GENERAL

For the year ending Sept. 30, 1900.

Salaries of seven officials and employees	\$10,920 00
Printing, including cost of paper and waste, per report Commissioners Printing	219 27
Postage and P. O. box rent	80 50
Traveling expenses of three (3) persons	617 92
Books	374 40
Stationery, per report Superintendent Public Property	70 60
Sundry items	107 87
Total	\$12,420 56

Pages 157, 158, 488 and 500 in the report of the Secretary of State for the year ending Sept. 30, 1900.

STATE SUPERINTENDENT.

This elective state officer has general charge of the educational interests of the state and the law confers upon him the power and prescribes appropriate duties.

The synopsis of laws which follow fully set forth his duties and privileges.

The salary provided for this officer by the constitution of the state is but \$1,200 annually. By provision of legislative acts he does, however, receive annually an amount for other services rendered to the state which will make his total salary the same as the Governor, Secretary of State and State Treasurer.

He is allowed to draw \$3,800 annually as commissioner for the common schools provided by chapter 99 of the laws of 1901.

By chapter 258 of the laws of 1901 it is proposed to submit to the people an amendment to the constitution to permit this officer to receive such a salary as the legislature shall designate instead of the \$1,200 provided by the constitution.

COMMON SCHOOLS.

The common schools of the state are supported by the income of the school fund and the one (1) mill tax on all assessable property which is distributed under authority of the provisions of chapter 28 of the Wisconsin Statutes of 1898, sections 554 to 560, inclusive.

The amount apportioned to counties during the year ending September 30, 1900, was \$796,826.27, of which \$625,000 was the result of the one (1) mill direct tax on assessable property and the balance was interest on land certificate loans, bonds, certificates of indebtedness and bank deposits.

FREE HIGH SCHOOLS.

The state aids free high schools under the provision of section 491b and 496, pages 385 and 387 of the Wisconsin Statutes of 1898 and chapter 214 of the laws of 1899, which provide that

they may receive from the general fund of the state under conditions named one-half ($\frac{1}{2}$) of the amount actually expended for instruction in high schools over and above the amount required to be expended for common schools.

It is the duty of the State Superintendent to apportion the money among the high schools under the conditions provided by the laws referred to.

The amount expended by the state during the year ending September 30, 1900, was \$97,371.80.

MANUAL TRAINING IN HIGH SCHOOLS.

Under conditions named in sections 496b and 496c of the Wisconsin Statutes of 1898 the state gives further aid from the general fund to free high schools that have maintained manual training departments.

The State Superintendent is charged with the duty of passing upon the fact set forth by the city superintendents where such school is located and making certificate to the Secretary of State as required in the laws referred to.

The amount paid by the state on this account during the year ending September 30, 1900, was \$3,500.

COUNTY TRAINING SCHOOLS FOR TEACHERS.

By the authority of chapter 269, laws of 1899, the state aids counties in maintaining training schools for teachers provided no Normal schools are located therein.

The condition under which such aid is given is set forth in section five (5) of the act on page 456 of the session laws of 1899.

The total amount which can be paid out under this law is limited to \$2,500 annually. During 1900 only two (2) counties, Dunn and Marathon, established schools to conform to the requirements, and the amount appropriated was divided equally between them.

STATE SUPERINTENDENT.

Term and oath.

His term of office shall be two years.

He shall take his constitutional oath of office within 20 days after receiving notice of election and it shall be filed with the Secretary of State.

Wis. Stats., sec. 164, p. 256.

Office.

His office shall be in the capitol, where papers and documents relating to his office shall be deposited.

Wis. Stats., sec. 167, p. 258.

This act provides conditions under which the Secretary of State as Auditor may approve vouchers for transportation.

Ch. 426, L. 1901.

Salary.

His salary is \$1,200 annually and he is to be reimbursed his traveling expenses in making official visits required by law, for the preparation of Agricultural Courses in Common Schools.

Wis. Stats., sec. 170, p. 260.

As Commissioner under this act his salary is \$3,800 annually, and traveling expenses.

Ch. 199, L. 1901.

Assistant Superintendent.

He may appoint an assistant at \$1,800 annually and traveling expenses, whose oath of office and appointment shall be filed with Secretary of State.

Such assistant shall perform such duties as Superintendent shall prescribe.

Wis. Stats., sec. 165, p. 256, amended by ch. 297, L. 1899.

High School Inspector.

In like manner he may appoint a High School Inspector at \$1,800 and necessary expenses, who shall assist him as provided in this section. The salary and expenses of this office to be from the appropriation to free high schools.

Wis. Stats., secs. 165a, 170, p. 256.

Clerks, etc.

He may appoint clerks, as follows:

A chief clerk, at \$1,500 annually, who shall have charge of the office books and correspondence.

A library clerk at \$1,400 annually, who is allowed travelling expenses, and who shall aid school libraries.

An index filing clerk at \$1,000.

A mailing clerk at \$1,000.

A clerk and stenographer at \$720.

Wis. Stats., sec. 165b, p. 256, amended by ch. 297, L. 1899.

Duties.

He shall have general supervision over common schools, and it shall be his duty

1. To visit and inspect the schools and work for the cause of education, as herein stated.
2. To recommend the most improved text-books and advise and correspond regarding the improvement in the common school system.
3. To prescribe rules and regulations regarding school libraries, laws and courses of study.
4. To examine and determine finally appeals under the laws and prescribe rules of practice in respect thereto.
5. To collect educational work.

He may expend therefor not over \$150 a year.

6. To apportion and distribute school fund income.
7. To make copies when required of any paper in his office or any of his acts or decisions, and he may charge therefor 12c per folio.

Wis. Stats., sec. 166, p. 256.

8. To deliver his report to the Governor on or before Dec. 10 each even numbered year.

Wis. Stats., sec. 355b, p. 314.

(This subdivision states what his report shall embrace.)

Ch. 97, L. 1901.

9. To hold at least four conventions yearly for consultation, etc., with county superintendents.

This act provides for an additional report to be made to the Governor before Jan. 10, each odd-numbered year.

9,000 copies of the biennial report of the State Superintendent shall be printed, not to exceed 250 pages.

U. S. grant of public land.

Every 16th section of public land of the U. S. is granted to the state for the use of schools.

Enabling act, p. 49.

State Superintendent.

The supervision of public instruction is vested in the State Superintendent, who shall be chosen by the electors of the state. His compensation shall not exceed \$1,200, annually.

Const., art 10, sec. 1, p. 119.

School fund, interest of, how applied.

The interest of the school fund shall be applied to the support and maintenance of public schools, the purchase of suitable libraries and apparatus therefor.

Const., art. 10, sec. 2, p. 119.

District schools; tuition; sectarian instruction.

Provides for the establishment of district schools, which shall be uniform and free from tuition charge to children between four and twenty, and no sectarian instruction shall be allowed.

Const., art. 10, sec. 3, p. 119.

Annual school tax.

Each town and city shall raise by tax for support of common schools annually, a sum not less than one-half the amount received by such municipality for school purposes from the income of school fund.

Const., art. 10, sec. 4, p. 120.

Income of school fund.

Provision for the distribution of school fund income.

When no distribution.

Const., art. 10, sec. 5, p. 120.

Regents.

He is ex-officio member of the Regents of Normal Schools.

Wis. Stats., sec. 393, p. 326, amended by ch. 74, L. 1899.

Board of Visitors.

He shall appoint a Board of Visitors for Normal Schools.

Wis. Stats., sec. 406, p. 340.

Report of academies.

He shall receive on or before October 10 of each even-numbered year a report from the trustees of academies and institutions for the year ending with the 31st of August of the second preceding year.

What report shall contain.

Wis. Stats., sec. 411, p. 341, including secs. 407, 408.

Record of examination.

He shall record the date of certificates issued and the name, age and residence of person to whom issued and preserve on file in his office all papers relating to the examination of applicants for state certificates.

Wis. Stats., sec. 456, p. 367.

Compensation of examiners.

The State Superintendent shall fix and certify all the actual and necessary expenses incurred by the examiners.

Wis. Stats., sec. 458, p. 367.

Examinations for superintendents certificates.

Relates to the conduct of examination for teachers' state certificates.

Wis. Stats., sec. 461 l, p. 373.

Purchase of books; librarian and records.

He shall prepare a list of books and furnish the same for district libraries. He shall furnish to each town clerk record books for the use of his office in connection with duties specified in this section.

Wis. Stats., sec. 486a-b, p. 382, amended by ch. 272, L. 1899.

Farm bulletins.

He shall distribute farm bulletins deposited with him by the Superintendent of Agricultural Institutes.

Wis. Stats., sec. 486c, p. 383.

State aid.

He shall certify the amount to be paid in aid of free high schools to the Secretary of State.

Wis. Stats., sec. 491b, p. 386.

State aid, how obtained.

State aid to manual training schools—how secured, amount of and how paid.

Limitations as to amount of state aid.

Amount of state aid how determined and obtained.

Wis. Stats., sec. 496, p. 388, amended by ch. 214, L. 1899.

Supervision and course of study.

State Superintendent's duties in the line of supervision.

Wis. Stats., sec. 496a, p. 388.

State aid for manual training department.

Wis. Stats., sec. 496c, p. 389, amended by ch. 273, L. 1899.

Dictionaries.

He may furnish to any school district or department thereof one copy of Webster's Dictionary, on receipt of an affidavit of the proper officer that the school has not been supplied or that the one furnished has been lost or is unfit for use. On payment in advance of the cost price to said Superintendent for any so to be re-placed.

He may sell, at the cost price, to any of the charitable, educational, reformatory, or penal institutions on the written requisition made by institution superintendent, as many copies of such dictionary, not exceeding the number of departments in the institutions, as may be necessary.

He may also furnish each county superintendent, each teacher employed in Normal Schools or University, each state officer and member of Legislature and their employees, with one copy thereof at cost price.

He may purchase, at not exceeding \$7 per copy delivered at his office, a sufficient number of copies of such dictionaries to furnish as above and the expense thereof shall be paid out of the state treasury.

Wis. Stats., sec. 509, p. 592.

Payment of money.

The State Superintendent shall pay to the State Treasurer all the money received on account of dictionaries sold as afore stated and render an account of all dictionaries sold in his report to the Governor.

Wis. Stats., sec. 511, p. 592.

Apportionment of; loss of right.

School Fund income tax.

Apportionment to counties how made.

There shall be no apportionment when schools are not maintained 7 months in the year.

Wis. Stats., sec. 554, p. 403, amended by ch. 115, L. 1899.

Certificate and notice.

He shall certify the apportionment made to the Secretary of State immediately giving notice to each county clerk and county treasurer stating amount apportioned to his county.

Wis. Stats., sec. 555, p. 404.

Correction of apportionment.

Procedure when there is a correction to be made in the apportionment.

Wis. Stats., sec. 556, p. 404.

State aid to schools.

When application is made to him, the State Superintendent shall, with the consent of the Board of Control, grant permission to establish schools for instruction of deaf-mutes residents of this state.

Mayor of any city and president of any village which shall maintain such schools shall report to the State Superintendent annually, and oftener if so directed, facts in relation to such schools as they may require.

Accounts, how made.

Certificates and affidavits substantiating accounts for sums to be paid for support of such schools shall be approved in writing by the State Superintendent.

Wis. Stats., sec. 578, p. 425; sec. 579, p. 426.

Postage.

He is entitled to postage stamps and stamped envelopes for his office for official correspondence at the expense of the state.

Wis. Stats., sec. 169, p. 258.

Stationery.

He or his assistant may procure stationery for his office at the expense of the state.

Wis. Stats., sec. 290, p. 301.

Duties of State Superintendent.

He shall give information and assistance in organizing training schools in counties for common school teachers.

He shall prescribe the courses of studies to be pursued and determine the qualifications of the teachers.

He shall supervise and inspect the same.

Ch. 268, L. 1899.

County training schools.

The secretary of each county training school board shall report to the Superintendent on each July 1. Upon receipt of such report, if satisfactory, the Superintendent shall make a certificate to that effect and file the same with the Secretary of State.

Ch. 268, L. 1899.

The assistant state superintendent and library clerk shall be reimbursed expenses actually incurred in performance of duty when such accounts are approved by the Superintendent.

Ch. 297, L. 1899.

Appointment of Harvey as commissioner.

Appointment of State Superintendent L. D. Harvey as commissioner to investigate methods of manual training. Duties.

Ch. 121, L. 1899.

\$1,000 may be used by the State Superintendent for providing public lectures in connection with institutes.

Wis. Stats., sec. 408, p. 340, amended by ch. 179, L. 1899.

Institute instructors.

No money shall be paid for services rendered as an instructor in any institute to any person unless he holds a certificate signed by the State Superintendent certifying that the committee on institutes of the Board of Regents of Normal Schools approves of said person as a competent institute instructor.

Wis. Stats., sec. 4611, p. 372.

School fund tax; apportionment.

School fund apportionment.

He shall apportion the school moneys each county will be entitled to receive and certify the apportionment so made to the Secretary of State and State Treasurer and he shall at the same time certify the amount of said tax to each county clerk and treasurer.

Wis. Stats., sec. 1072a, p. 827.

Report of academies.

On or before October of each even-numbered year he shall receive the report of the academies.

What report shall contain.

Wis. Stats., sec. 411, p. 341.

Any person who has graduated from a regular collegiate course at the University and after such graduation shall furnish evidence to the State Superintendent of good moral character and of successful teaching for one year in a public school of this state may have his diploma countersigned by said Superintendent which shall then have the force and effect of a limited state certificate, subject to the power vested in the State Superintendent to revoke the right given by his signature to such diploma.

Wis. Stats., sec. 387, p. 333.

This act adds a new section to be known as 497a and relating to the review of the decisions of the State Superintendent.

Ch. 184, L. 1901.

Whenever there shall be a vacancy in the office of the county superintendent the State Superintendent may appoint a suitable person to such office until another shall be elected and qualified.

Wis. Stats., sec. 967, p. 765.

The State Superintendent shall furnish each office by whom a report shall be made blank forms upon which they shall make their annual reports.

Wis. Stats., sec. 466, p. 375.

He is authorized to issue certificates as herein provided for after countersigning diploma issued by the State University. Force and effect of this act results in a legal license to teach in public schools.

Ch. 171, L. 1901.

This act relates to the decisions of the State Superintendent provided for by chapter 27 of the Wisconsin statutes of 1898.

Ch. 180, L. 1901.

This act provides for the establishing and maintenance of county schools of agriculture and recites the duties of the State Superintendent in connection therewith.

Ch. 238, L. 1901.

The State Superintendent may appoint two competent persons who shall act under his direction as inspectors of day school for the deaf and for the school for the deaf at Delavan. When not engaged in the inspection of the schools such inspectors shall perform such other duties as the State Superintendent shall direct.

Ch. 422, L. 1901.

This act authorizes the State Superintendent to appoint two persons to assist him in the inspecting and supervising of state graded and free high schools to be known as the state school inspectors.

Ch. 439, L. 1901.

DISBURSEMENTS IN THE DEPARTMENT OF STATE SUPERINTENDENT

For the year ending Sept. 30, 1900.

Salaries of eight (8) officials and clerks	\$10,520 00
Travelling expenses of five persons	1,998 56
Dictionaries purchased to be sold.....	4,404 00
Postage and P. O. box rent	915 80
Printing, including memorials, and arbor day annuals and cost of paper and waste, per report Commissioners of Printing.....	3,665 81
Expressage	758 69
Stationery, per report Superintendent Public Property	219 42
Sundry items	143 49
Total	\$25,525 47

• Pages 158, 488 and 500 in the report of the Secretary of State for the year ending Sept. 30, 1900.

DISBURSEMENTS ON ACCOUNT OF COMMON SCHOOLS

For the year ending Sept. 30, 1900.

Per diem expenses of three (3) persons	\$844 80
Interest on certificates of indebtedness due from general fund to school fund income	109,459 00

Total, \$110,303.80 per page 182, and \$691,500.32 per pages 212-213.

transfers having been deducted, making, in all.....\$801,804 12

See report of the Secretary of State for the year ending Sept. 30, 1900.

DISBURSEMENTS IN COUNTY TRAINING SCHOOLS FOR TEACHERS

For the year ending Sept. 30, 1900.

Amount of state appropriation, divided equally between Dunn and Mara- thon counties	\$2,500 00
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Page 182 in the report of the Secretary of State for the year ending Sept. 30, 1900.

DISBURSEMENTS IN FREE HIGH SCHOOLS

For the year ending Sept. 30, 1900.

Amount apportioned to the various counties in the state	\$97,571 80
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Page 197 in the report of the Secretary of State for the year ending Sept. 30, 1900.

DISBURSEMENTS IN CONNECTION WITH MANUAL TRAINING IN
HIGH SCHOOLS.

For the year ending Sept. 30, 1900.

Amount paid to ten (10) cities complying with the law	\$3,500 00
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Page 197 in the Secretary of State's report for 1900.

DISBURSEMENTS IN CONNECTION WITH DEAF MUTE INSTRUCTION
IN CITIES.

Amount paid to 15 cities complying with the law	\$25,749 64
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• Page 191 in Secretary of State's report for 1900.

RAILROAD COMMISSIONER.

This elective state officer is charged with the duty to inspect and examine the condition of the railroads doing business in the state with relation to the public safety and convenience.

Any one desiring the full details of his powers and duties, reference should be made to the section of the Wisconsin Statutes of 1898 and the acts amendatory thereto to which reference is made in the compilation which follows.

RAILROAD COMMISSIONER.

How chosen; election and term.

He shall be chosen at the general election each even-numbered year for a term of two years, beginning the first Monday in January succeeding election.

No person owning stocks or bonds or in the employ of or interested otherwise pecuniarily in any railroad or transportation company shall be eligible to this office.

Wis. Stats., sec. 128, p. 249; sec. 1792, p. 1321.

Salary; resignation.

His salary is \$3,000 annually.

If he resigns his resignation shall be made to the Governor.

Sections 94k, 94L and 965 provide how vacancy may be filled.

Wis. Stats., sec. 170, p. 261; sec. 961, p. 763.

His oath and bond.

He shall take the oath herein provided.

His bond shall be \$20,000, with sureties approved by the Governor.

Bond shall be filed with the Secretary of State.

Wis. Stats., sec. 1793, p. 1321.

Assistance.

He shall appoint a deputy commissioner whose salary shall be \$1,750 annually, and who shall have the same power as Commissioner. His oath shall be as herein provided and shall be filed with the Secretary of State. He shall give such bond to the Commissioner as the latter may prescribe.

No other clerical assistance is provided.

Wis. Stats., sec. 170, p. 261.

Duties.

He shall inquire into any neglect or violation of the laws of the state by any railroad corporation doing business therein. He shall inspect and examine the condition, equipment and manner of management of any and all railroads doing business in the state with relation to the public safety and convenience. He shall also examine and ascertain the pecuniary condition and the manner of the financial management of every such railroad corporation.

Wis. Stats., sec. 1794, p. 1321.

Further duties; companies to report.

His duty relating to complaints made in writing.

He shall on or before Feb. 10 in each year ascertain and return to the State Treasurer:

1. The actual cost of each railroad in this state up to and including Dec. 31, the next preceding.
2. The total gross receipts resulting from the operation of every such railroad during the next preceding year.
3. The total net earnings resulting from the operation of every railroad during the preceding year.
4. The total interest-bearing indebtedness of the corporation owning or operating such railroad and the amount of interest paid such corporation during the preceding year, ending on the 31st of December.

Wis. Stats., sec. 1796, p. 1322.

Powers; witnesses.

He shall have the power to examine witnesses, administer oaths, send for persons or papers and at any and all times may have access to all books and papers of every such railroad corporation in any railroad ounce of this state.

Wis. Stats., sec. 1796, p. 1323.

Railroad maps.

He shall supervise the publishing of the 25,000 copies of railroad maps of Wisconsin.

How certain number of copies shall be mounted.

Wis. Stats., sec. 1795a, p. 1323.

Office supplies, expenses, transportation.

He shall keep his office at the capitol and shall be provided with all necessities, and the expense thereof shall be paid out of the state treasury.

Commissioner and his deputy shall have the right of passing, in the discharge of their official duties, on all railroads and railroad trains free of charge.

Wis. Stats., sec. 1797, p. 1323.

Books to be produced; bridge devices.

He may require railroad corporations to produce their books as may be required, as herein provided.

He may approve interlocking bridge device and safety crossings.

Wis. Stats., sec. 1751, p. 1264.

Postage.

He shall be furnished with postage and stamped envelopes for his official correspondence.

Wis. Stats., sec. 169, p. 258.

Stationery.

He shall be furnished with necessary stationery.

Wis. Stats., sec. 290, p. 301.

Blue Book.

He may have 125 copies of Blue Book.

Wis. Stats., sec. 121, p. 236.

Palace, sleeping and drawing room cars.

Every owner of palace, sleeping and drawing room cars shall make and return to the Railroad Commissioner a true statement of the gross earnings made by the use of such cars between points within this state.

Wis. Stats., sec. 1222b, p. 927.

R. R.; return of earnings.

A true statement of the gross earnings made and returned to the State Treasurer by every railroad company.

Wis. Stats., sec. 1211, p. 922.

Report, when to be made.

Every person or corporation owning or operating a street railway within the state of Wisconsin shall on or before Jan. 31, report to the Railroad Commissioner annually of its operations during the preceding year.

Ch. 329, L. of 1899, p. 599.

Provides for an additional report to be made to the Governor odd-numbered year.

Ch. 97, L. 1901.

What report shall contain.

Ch. 308, L. 1899.

Penalty in case of neglect.

Provides for report to him from assessors.

Board to hear and determine complaints against R. R. Cos.

The Railroad Commissioner, Attorney General and Governor are hereby constituted a board to hear, try and determine the complaints.

Railroad Commissioner shall investigate the complaints and report to the Board.

Ch. 225, p. 376.

Printing.

The report of the Railroad Commissioner shall be limited to 200 pages and 1,000 copies shall be printed.

Wis. Stats., sec. 325b, p. 314.

DISBURSEMENTS ON ACCOUNT OF THE DEPARTMENT OF THE RAILROAD COMMISSIONER.

For the year ending Sept. 30, 1900.

Salaries of officials and employees	\$5,310 00
Traveling expenses of commissioner and deputy.....	984 34
Printing, including cost of paper and waste, per report Commission- ers Printing	490 93
Postage and P. O. box rent	167 00
Stationery, per report Superintendent Public Property	40 63
Sundry items	126 84
Total	\$7,129 74

Pages 159, 488 and 500 in the report of the Secretary of State for the year ending Sept. 30, 1900.

INSURANCE COMMISSIONER.

This elective state officer is charged with the duty of determining under the state laws as to what companies shall do business in the state.

The reports which shall be made to him, his power, duties and privileges are as outlined in the laws which follow:

COMMISSIONER OF INSURANCE.

Election and term.

He shall be chosen biennially at the general election in even-numbered year.

Wis. Stats., sec. 128, p. 240.

Salary.

His salary shall be \$3,000, annually.

(Secs. 961 and 94k, 94L, provides how he may resign and how vacancy may be filled.)

Wis. Stats., sec. 170, p. 261.

Commissioner's oath, bond, office—Reports.

Before entering upon his duties he shall take the oath of office and execute a bond for \$20,000, as herein required. The oath shall be filed with the Secretary of State and the bond with the State Treasurer, after having been approved by the Governor. He shall have an official seal and conduct examinations and exercise such control of insurance corporations as may be required by law.

His office shall be in the capitol and he shall be provided with postage, printing office supplies and Blue Books.

All insurance companies shall report to him.

Wis. Stats., sec. 1967, p. 1483; sec. 121, p. 236; sec. 169, p. 258; sec. 290, p. 301.

Deputy and other assistants and salaries.

He may appoint a deputy at \$1,500 annually, whose oath of office shall be filed with the Secretary of State and who shall give a bond to the Commissioner as he may prescribe. Such deputy shall have the same power as Commissioner in case of the latter's sickness or absence or when detailed to do special acts.

He may appoint:

A chief clerk at \$1,200 annually.

An actuary at \$1,200 annually.

An examiner at \$1,200 annually.

Two clerks at \$1,200 each annually.

A stenographer at \$720, annually.

A filing clerk at \$900 annually.

A messenger at \$900, annually.

A mailing clerk at \$900, annually.

Wis. Stats., sec. 1967a, p. 1483; sec. 170, p. 261.

Investigation; fees; revocation of license.

The Commissioner may address inquiries to any insurance company doing business in this state or any officer thereof in relation to its doings or conditions or any other matter connected with its transactions, and it shall be the duty of every corporation or officer so addressed to promptly reply in writing to such inquiries; and, whenever he shall deem it expedient to do so, or when any responsible person shall file with him written charges against any such corporation, alleging that any return or statement filed by it with such Commissioner is false or that its affairs are in an unsound condition, he shall, in person, or by some one to be appointed by him for that purpose, not an officer or agent of, or in any manner interested in, any insurance corporation doing business in this state, except as a policy holder, examine into its affairs and condition; and it shall be the duty of the corporation, its officers or agents to cause its books to be opened for inspection, and to pay all reasonable expense of and compensation for such examination upon the certificate and requisition therefor of said Commissioner; which expenses, however, shall not exceed \$5 per day during the time of the examination and 5c per mile for traveling.

Whenever it shall appear to the said commissioner from his own examination or the report of the person appointed by him that the condition of any foreign company examined is unsound he shall revoke the certificate granted such company and cause a notification thereof to be published in the official state paper and mail a copy thereof to each agent.

The Commissioner shall examine insurance corporations applying for admission to transact business in this state, and if the affairs or condition of any such corporation do not fully meet the requirements of law he shall withhold his certificate.

Wis. Stats., sec. 1968, p. 1483.

Restoration of capital.

Provides the duty of the Commissioner as to requiring restoration of capital of insurance companies, as herein provided.

Wis. Stats., sec. 1969, p. 1484.

Reduction of capital.

Provides that the Commissioner may, as herein provided, authorize corporations to continue business on reduced capital stock where capital has been impaired.

Wis. Stats., sec. 1970, p. 1484.

Forms for and publication of statements.

The Commissioner of Insurance shall prepare and furnish to each insurance corporation organized under the laws of the state and to the attorneys of corporations incorporated in other states and countries, doing business of insurance in this state printed forms of annual and other statements as required by law to be made by such corporations, and may make such changes in such forms as shall seem best adapted to elicit from them a true exhibit of their condition in relation to the matters required by law to be reported to him; and all such corporations shall make such statements as required by the said commissioner; and he may for such reasons as he shall deem sufficient, extend the time for filing such annual statements, but not exceeding 60 days.

He shall cause condensed statements of certain companies to be published in the state official paper and in one other daily newspaper.

Wis. Stats., sec. 1971, p. 1485, amended by ch. 192, L. 1899.

Fees payable.

There shall be paid to the commissioner in addition to the fees elsewhere in these statutes provided for, by every insurance corporation, person or agent to whom this chapter applies, the following fees: For filing the first declaration or statement, with certified copy of charter, \$25. For filing the annual statement of any insurance corporation, \$25.

For each certificate of authority issued by him to each agent of any foreign fire or marine insurance company not organized as aforesaid, \$2.

For every copy of a paper filed in his office, other than such declarations and statements, 15 cents per folio.

For certifying and affixing his seal to any paper, 50 cents.

Millers' and manufacturers' mutual insurance corporations shall pay

For filing the first declaration or statement and issuing certificate thereon, \$10. For filing annual statement and issuing certificate thereon, \$3.

Wis. Stats., sec. 1972, p. 1485.

Agents to be licensed.

No officer or broker, agent or sub-agent of any insurance corporation of any kind, except town insurance corporations of this state shall act or aid in any manner in transacting the business of or with such corporation, in placing risks or effecting insurance therein without first procuring from the Commissioner a certificate of authority as provided by law nor after the period named in such certificate shall have expired.

Wis. Stats., sec. 1976, p. 1488.

Proceeding if law violated; expenses.

The Commissioner shall bring notice of the violation of any of the provisions of this chapter by insurance companies to the notice of any company which shall have committed the same. And in case of persistent violation thereof by any company he shall, if the company be incorporated under the laws of this state, report the same to the Attorney General.

He shall also bring or cause actions to be brought to recover all forfeitures imposed by these statutes for a violation of any of their provisions by insurance companies or their agents.

Wis. Stats., sec. 1972a, p. 1486.

Commissioner's report.

The Commissioner shall keep and preserve in a permanent form a full record of his proceedings, including a concise statement of the condition of each insurance company reported, visited or examined by him; and shall annually at the earliest date make a report to the Governor of the general conduct and condition of all such companies.

Wis. Stats., sec. 1972b, p. 1486, amended by ch. 233, L. 1901.

What report shall contain.

Provides for the preparation and distribution of the reports issued by the Commissioner of Insurance.

Ch. 1897, L. 1901.

Payments; monthly report.

The Commissioner shall make daily payments to the State Treasurer of all fees and taxes received and shall, on the first day of each month, report in detail the receipts of his department during the preceding month to the Governor, Secretary of State and State Treasurer, together with the dates of such payments to the Treasurer.

Wis. Stats., sec. 1972c, p. 1487.

Valuation of policies.

The Commissioner shall calculate the existing value of all the outstanding policies of any corporation not valued by the insurance department or proper officers of either state under whose laws it is organized, or of New York or Massachusetts and such corporation shall pay him compensation therefor as herein provided.

Wis. Stats., sec. 1950, p. 1458.

Fire and navigation insurance; fees.

Provide for payment by insurance companies of license fees to the Commissioner of Insurance.

Wis. Stats., sec. 1219, p. 925; sec. 1220, p. 925, amended by ch. 326, L. 1899, and ch. 21, L. 1901.

Fees of foreign companies.

Provide for payment by insurance companies of license fees to the State Treasurer.

Wis. Stats., sec. 1221, p. 925.

Formation of, for insuring property—Articles, what to contain.

Not less than 15 persons may organize an insurance corporation by filing articles of incorporation containing declarations as herein provided.

Wis. Stats., secs. 1896, 1897, p. 1388.

Commissioner shall approve of security of any accident association of \$1,000 before license is issued.

Ch. 442, L. 1901.

Articles, proof of publication.

Proof of publication of such articles shall be filed with the Commissioner.

Wis. Stats., sec. 1899, p. 1389.

Examination, patent; name.

The Commissioner shall cause examination of corporations as herein provided.

Provision is made for filing certificate with the Commissioner as to the condition of such corporation.

Commissioner shall have the right to reject proposed name or title when he deems it likely to mislead the public.

Wis. Stats., sec. 1900, p. 1390.

In the foregoing condensed compilation of the duty of the Commissioner of Insurance no reference has been given to numerous provisions of law which specifically provide the detailed procedure of the Insurance Department in connection with each class of corporations.

For the benefit of those seeking such details, the following reference index to the statutes may be of service:

Special funds, duty as to, Wis. Stats. of 1898, sec. 1909, p. 1394.

Where funds or capital are impaired, Wis. Stats. of 1898, sec. 1912, p. 1395.

Foreign insurance corporations, Wis. Stats. of 1898, sec. 1915, p. 1396; sec. 1919, p. 1401.

Reports and statements, when made; what to show, Wis. Stats. of 1898, sec. 1920, p. 1401; sec. 1921, p. 1403.

Town insurance companies, Wis. Stats. of 1898, sec. 1927, p. 1406; articles filed with, sec. 1932, p. 1408; reports, sec. 1938, p. 1411.

Millers' and manufacturers' insurance companies, duty as to, Wis. Stats. of 1898, secs. 1941a, b, c, d, pp. 1412-1414.

Mutual companies in cities and villages, duty as to, Wis. Stats. of 1898, sec. 1941-1, p. 1415; sec. 1941-6, p. 1417; sec. 1941-12, p. 1418. Bankers' mutual casualty companies, duty as to, ch. 65, laws 1899, p. 88.

Druggist insurance companies, duty as to, Wis. Stats. of 1898, sec. 1941-14, p. 1419; sec. 1941-20; sec. 1941-22, p. 1421.

Church fire insurance companies, duty as to, Wis. Stats. of 1898, sec. 1941-23, p. 1421; sec. 1941-25, p. 1422; sec. 1941-28; ch. 118, L. 1899, p. 176.

Lumber dealers' insurance associations, duty as to, Wis. Stats. of 1898, sec. 1941-34, p. 1424; sec. 1941-36; sec. 1941-40, p. 1425.

Standard fire policy, duty as to, Wis. Stats. of 1898, sec. 1941-42, p. 1425.

Fire insurance company, power to revoke license; foreign fire companies, Wis. Stats. of 1898, secs. 1943a, b, p. 1451.

Duty as to inspection, Wis. Stats. of 1898, sec. 1945e, p. 1453; see Ch. 190, L. 1899.

Stock fire insurance companies, Ch. 166, L. 1899, p. 241.

Insurance on Lloyd's principle, Wis. Stats. of 1898, sec. 1945g, p. 1454.

Duty of commissioner in connection with Lloyd's principle, Ch. 249, L. 1901.

Assessments by foreign companies, Wis. Stats. of 1898, sec. 1945i, p. 1454.

Life companies, approval of, Wis. Stats. of 1898, sec. 1947, p. 1456;

examination of, sec. 1948—9, p. 1457; papers to be filed, sec. 1953, p. 1458.

Life companies, reports, domestic, Wis. Stats. of 1898, sec. 1954—5, pp. 1459—60.

Assessment of mutual companies, duty as to, Wis. Stats. of 1898, secs. 1955a to n, pp. 1460 to 66.

Life companies, discrimination in rates, Wis. Stats. of 1898, sec. 1955o, p. 1466.

Domestic hail companies, Wis. Stats. of 1898, sec. 1965, p. 1469.

Foreign hail companies, Wis. Stats., of 1898, secs. 1966—1-11, pp. 1469 to 1472.

Mutual live stock companies, Wis. Stats. of 1898, secs. 1966—14-15-24, pp. 1472 and 1473.

Domestic, casualty, credit, title, suretyship companies, Wis. Stats. of 1898, secs. 1966--26-31, pp. 1474-76; sec. 1966—46, p. 1481; sec. 1966-32, p. 1476.

Foreign—same.

Insurance of domestic animals, Wis. Stats. of 1898, secs. 1966—51 to 54; p. 1482.

DISBURSEMENTS IN THE INSURANCE DEPARTMENT.

For the year ending Sept. 30, 1900.

Salaries of ten (10) officials and employees	\$13,020 00
Travelling expenses of two (2) persons	97 67
Printing, including cost of paper and waste, per report Commissioners of Printing	5,281 15
Postage and P. O. box rent	1,109 95
Expressage	1,586 25
Stationery, per report Superintendent Public Property	97 38
Telephone and telegrams	50 66
Total	\$21,245 06

Pages 159, 488 and 500 in the report of the Secretary of State for the year ending Sept. 30, 1900.

COMMISSIONERS OF TAXATION.

Commission of what to consist; appointments.

In order to secure improvement in the system and an equalization of taxation in this state, there shall be a commission of taxation, a first assistant commissioner and a second assistant commissioner. The Governor shall nominate and by and with the consent of the senate at this session, appoint as such officers persons known to him to possess knowledge of the subject of taxation and skill in matters pertaining thereto, to serve ten years from May 1, 1899.

Ch. 206, L. 1899.

Wis. Stats., sec. 1, p. 341.

To take oath of office.

The commissioner and his assistants and any clerk appointed by him, within 30 days after his acceptance of such appointment and before entering upon their duties, shall take, subscribe and file with the Secretary of State the constitutional oath.

Wis. Stats., sec. 2, p. 341.

Power and duty of commissioner.

The commissioner shall have general supervision of the system of taxation throughout the state, shall have power to make a thorough investigation thereof, and shall report to the legislature on the first day of each regular session the results of his supervision and investigation, and shall formulate and recommend legislation for the improvement of the system and for the equalization of the taxation of the state. He shall keep in his office a public record of his acts and orders and print for general circulation such information as he may deem proper.

Wis. Stats., sec. 3, p. 342.

This act defines and enlarges the powers and duties of the commissioner.

Ch. 220, L. 1901.

He may take testimony, etc.

Wis. Stats., sec. 4, p. 342.

Duties of assistant commissioners.

The commissioner shall prescribe the duties of the assistant commissioners, and in the performance thereof they shall exercise so far as necessary the power hereby vested in the commissioner.

Wis. Stats., sec. 5, p. 342.

Commissioners to preside over meeting of State Board of Assessment.

The commissioner shall be a member and preside at the meetings of the Board of Assessment, and shall lay before the Board such information within his possession as in his judgment will assist it in its deliberations.

Wis. Stats., sec. 6, p. 343.

Compensation of commissioners and employes.

The annual compensation of the commissioner shall be \$5,000; assistant commissioner, \$4,000 annually; second assistant commissioner, \$4,000 annually.

The commissioner shall fix the compensation of any clerk or employee in his office; and no person while serving as commissioner or as either of his assistants, or as a clerk in his office, shall hold any other office or position of trust or profit, or pursue any other business or avocation, or serve on or under any committee of any political party.

Wis. Stats., sec. 7, p. 343, amended by ch. 322, L. 1899.

Office supplies, who to furnish.

Rooms in the capitol shall be set apart for the use and furnished under the direction of the commissioner. He shall be furnished with necessary postage, stationery and supplies and his printing done by the commissioners of public printing.

Wis. Stats., sec. 8, p. 343.

Appropriation clause.

The salaries of the commissioners, his assistants and clerks, their necessary traveling expenses and all other disbursements of his office shall be paid out of the state treasury, as the salaries and expenses of other state officers are paid, and a sum sufficient to carry out the provisions of this act is hereby appropriated.

Wis. Stats., sec. 9, p. 343, amended by ch. 220, L. 1901.

This law constitutes the commissioner and the first and second assistants a State Board of Assessment, and prescribes their duties in relation thereto.

Ch. 237, L. 1901.

DISBURSEMENTS IN THE DEPARTMENT OF THE TAX COMMISSIONERS

For the year ending Sept. 30, 1900.

Salaries and services of nine officials	\$15,012 18
Travelling expenses of three (3) persons	191 52
Freight and expressage	49 14
Printing, including cost of paper and waste, per report Commissioners of Printing	180 03
Postage and P. O. box rent	1,026 00
Stationery, per report Superintendent Public Property.....	344 66
Telephone and telegrams	17 46
Total	\$16,820 38

Pages 160, 488 and 500 in the report of the Secretary of State for the year ending Sept. 30, 1900.

DISBURSEMENTS IN "OLD TAX COMMISSION OF 1898."

Printing second edition of their report, including cost of paper and waste, per report Commissioners Printing	854 97
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Pages 156 and 488 in the report of the Secretary of State for the year ending Sept. 30, 1900.

COMMISSIONERS OF PUBLIC LANDS.

The Commissioners of Public Lands are the Secretary of State, State Treasurer and Attorney General, as provided by the constitution.

They have the supervision and care of state lands or of lands of which the state has an interest. They receive no compensation as such commissioners.

Chapter 258 of the laws of 1901 provides that the land office should be removed to the office of the Secretary of State, reduces the salaries of the land-office clerks and places them under the Secretary of State. This was to have been effective January 1, 1901. The provisions of this act were never carried out. Chapter 432, laws of 1901, reorganizes the land-office, restores the salaries of the chief clerk and assistant chief clerk and provides that the Commissioners of Public Lands may employ such clerks and pay such salaries as may be deemed necessary provided that not more than \$6,500 shall be expended for salaries during one year, including the salaries of the chief clerk and assistant chief clerk.

In certain cases the subject head only is given in the compilation which follows, because those desiring the detailed procedure as to drainage fund, the sale of public lands, forfeiture and resale, annulment of certificates, etc., should consult the statutes.

The province of this pamphlet is to give an outline only of the duties of each department.

COMMISSIONERS OF PUBLIC LANDS.

Commissioners of school and university lands.

The Secretary of State, State Treasurer and Attorney General shall constitute a board of commissioners for the sale of the school and university lands and for the investment of the funds therefrom.

Any two of said commissioners shall be a quorum for the transaction of all business pertaining to the duties of their office.

Const., art. 10, sec. 7, p. 120.

Commissioners and their powers.

They have the general care and supervision of all lands belonging to the state or in which it has an interest.

They may make investigations concerning the rights of the state to indemnity swamp-lands and select and secure all such lands as it is or may hereafter be entitled to.

The accounts for expenses incurred in so doing, on their approval, shall be payable out of the general fund.

Wis. Stats., sec. 185, p. 269.

Office and records; copies as evidence.

They shall keep their office at the capitol. They shall arrange and preserve therein all records, books, reports, surveys, etc., pertaining to the public lands heretofore, including all such as have been or shall be received from the United States or any officer thereof. All records, books and files kept by the commissioners shall at all business hours be open to the inspection of any person free of charge.

(Wis. Stats., sec. 186, p. 269.

Clerks and their oaths.

The commissioners may employ one chief clerk at \$1,800, an assistant chief clerk at \$1,600, and other clerks at salaries the commissioners deem necessary, provided the entire amount paid in salaries is not over \$6,500 annually. They shall take the oath of office herein provided.

Wis. Stats., sec. 187, p. 269, amended by ch. 452, L. 1901.

Investment of funds.

They, by and with the approval of the Governor, may direct the investment of so much of the money of any fund or of the income of any fund in the state treasury as they may deem advantageous to the state to so invest and also direct the disposal of any such bonds at any time by their written order, approved by the Governor and recorded in the office of the Secretary of State.

Wis. Stats., sec. 160, p. 252.

They are authorized by this act to direct the loan from the trust fund of \$75,000 to be repaid to the trust fund as herein provided.

Ch. 230, L. 1901.

Fees.

They shall collect as fees 50 cents on every certificate and 50 cents on every patent, issued by them, to be paid by the purchaser and credited as herein provided.

Wis. Stats., sec. 189, p. 270, amended by ch. 432, L. 1901.

Expenses, how made.

All expenses incurred by them in the care and management of the funds, etc., and in the care, protection and sale of the public lands, including advertising, shall be fixed by the commissioners and paid out of the state treasury.

Wis. Stats., sec. 190, p. 270.

Survey of lands.

Whenever it shall appear to them necessary that surveys should be made in order to ascertain the true boundaries of any tract or portion of the public lands, or to enable them to describe and dispose of the same in suitable and convenient lots, they may cause all such necessary surveys to be made.

Wis. Stats., sec. 192, p. 270.

Plat of lands.

Whenever they shall deem it advantageous to any fund to be derived therefrom they may cause to be laid off into small village lots any tract or portion of the public lands held for sale, and to be appraised by three disinterested freeholders of the county in which the lands so to be subdivided are situated.

Such freeholders shall be appointed by the commissioners.

All reports, surveys, returns, maps and appraisals shall be recorded in the office of the commissioners.

Wis. Stats., sec. 193, p. 270.

Lease of lands.

They may from time to time lease for terms not exceeding one year and until the same are disposed of according to law, all such public lands under their care as shall have improvements on them.

Wis. Stats., sec. 194, p. 271.

Sale of land with water-power.

Whenever there shall be a water-power upon any of said lands which are offered for sale, it shall be optional with the commissioners to sell together all the tracts or lots upon which such water-power is situated and such other tracts or lots as are necessary for the use and enjoyment of the same; or they may sell each such tract or lot separately as in their opinion will be most beneficial to the fund to be derived from such sale.

Wis. Stats., sec. 195, p. 271.

Sale of public lands.

Relate to the duties of the commissioners with reference to the sale of public lands.

Wis. Stats., sec. 202, p. 272; sec. 212, p. 275, amended by ch. 432, L. 1901.

Wis. Stats., secs. 213-221, p. 276-279.

Is an act authorizing the commissioners to sell certain state lands in Buffalo Co.

Ch. 127, L. 1901.

Forfeiture and resale of lands.

Wis. Stats., secs. 227-229, p. 280-282.

Annulment of certificates and patents.

Wis. Stats., sec. 231, p. 282.

Taxes.

Lost certificates and patents.

Wis. Stats., sec. 233, p. 283; sec. 234.

Fees for advertising.

Fees for advertising sale of lands shall be 50 cents for each separate description of land, provided that any such advertisement shall not exceed fifteen descriptions; the fees to be paid therefor shall be the same as provided for publication of legal notices.

Wis. Stats., sec. 237, p. 284.

Commissioners' authority; seizure and sale of material.

The chief clerk shall, when necessary, examine the public lands and protect them from trespass or to aid in collecting damages for trespasses committed, and be paid his actual expenses while on such duty.

Commissioners may award persons informing them of trespass committed 20 per cent. of amount collected.

The commissioners shall have the power to seize or cause to be seized any lumber, timber, bark, minerals, or other materials or property cut upon, dug, removed or taken from any of the public lands belonging to this state, and sell the same at auction to the highest bidder under rules and regulations prescribed by them. On such sale they may cause a bid to be made on behalf of the state for not less than half the actual value of the property to be sold and such property shall be sold at such price as they deem best for the interest of the state.

Wis. Stats., sec. 238, p. 284; sec. 239, p. 284; sec. 240, p. 285.

Trespass by stranger and certificate holder.

Wis. Stats., sec. 241, p. 285.

Payments out of fines collected.

Payments to District Attorney out of fines collected.

Wis. Stats., sec. 243, p. 286.

Money, how disposed of.

All money received from the sale of logs, lumber, shingles, timber, minerals or other articles seized under the provisions of this chapter, or recovered in legal proceedings for damages done to public lands, shall be paid into the treasury to the credit of the respective funds to which the lands belong on which such trespasses were committed, and all other money collected as expenses, fees, penalties and damages for trespass on such lands shall be paid into the general fund.

Wis. Stats., sec. 245, p. 286.

Division of swamp land and funds.

All swamp lands and all moneys in lieu of swamp lands, which the state shall hereafter receive from the United States, shall on receipt thereof be equally divided between the normal school fund and the drainage fund by the commissioners.

Wis. Stats., sec. 251, p. 288.

Drainage fund.

Wis. Stats., sec. 253, p. 289; sec. 254.

Investment of trust funds.

Wis. Stats., secs. 258-263, pp. 290-296, amended by ch. 129, L. 1899; ch. 130, L. 1899; ch. 123, L. 1901.

Provides for date of interest payments on trust fund loans.

Ch. 72, L. 1901.

Appraisal and abstracts of land.

Appraisal, how made.

Duty of commissioners with reference to the appraisal and abstracts of mortgaged lands.

Appraisal, how made.

Wis. Stats., sec. 278, p. 296; sec. 279.

The Treasurer shall transfer to the trust fund from the general fund \$21,500 appropriated by this act, and trust fund commissioner shall cancel and file amount of the indebtedness of New Richmond to said trust fund.

Ch. 286, L. 1901.

Lands, how sold; reduction of price.

Said lands how sold by commissioners.

Reduction of price.

Wis. Stats., sec. 280, p. 296; sec. 281, p. 297.

Proceedings if debt not discharged by sale.

Wis. Stats., sec. 282, p. 297.

Forfeited mortgaged lands. Redemption.

Wis. Stats., sec. 282a, p. 297.

Lands to be sold.

Duty of commissioners when they have reason to believe that any lands have escheated to the state for defect of heirs.

Wis. Stats., secs. 284, 285, 286, p. 298.

Right of way through public lands.

Wis. Stats., sec. 1857, p. 1370.

Tax for and appropriation of part-loans.

They may direct the State Treasurer to set apart by way of loan to the fund known as the university income for university uses such uninvested moneys or part thereof in the trust funds for the period while so uninvested as in their judgment shall be prudent, such loan to be repaid from the trust funds from the portion of such tax hereinbefore appropriated, with interest at the rate then required on deposits made pursuant to sections 160a to 160f inclusive.

Wis. Stats., sec. 390, p. 335, see ch. 170, L. 1899.

State tax loans.

They may loan to the Board of Normal School Regents such part of the normal school funds as they deem prudent, not to exceed \$60,000, to be repaid from the income of the normal schools and from any appropriations hereafter made for their support and maintenance, as follows:

Feb. 1, \$5,000, 1898.

Feb. 1, \$5,000, 1899.

Feb. 1, \$10,000 each year thereafter until said loan is fully paid and discharged.

Wis. Stats., sec. 406a, p. 240, see ch. 170, L. 1899.

The commissioners are authorized to loan a portion of the trust funds of the state to the city of Rhinelander, Oneida Co., Wis.

Ch. 126, p. 193, L. 1899.

They may loan a portion of the trust funds of the state to the county of Door and to the city of Sturgeon Bay, Wis.

Ch. 241, p. 199, L. 1899.

To set aside certain state land to the Wisconsin Military Reservation.

Ch. 293, p. 516, L. 1899.

This act requires them to convey to grantees of the Sturgeon Bay of Lake Michigan Ship, Canal and Harbor Co. certain lands herein described.

Ch. 287, L. 1901.

Printing.

Eight hundred and fifty copies of the report of the commissioners of public lands shall be printed, not to exceed 50 pages.

Wis. Stats., sec. 335b, p. 314.

Authorizes Portage county to borrow \$80,000 from the trust funds and the commissioners of public lands shall have authority to make the loan to the state.

Ch. 45, L. 1901.

STATE FOREST WARDEN.

State forest warden.

The chief clerk of the land office shall be the state forest warden, and he may appoint a clerk in such office as his deputy with duties as herein provided.

Wis. Stats., sec. 1636b, p. 1185; amended by ch. 432, L. 1901.

Fire warden; duty, pay and liability.

The state forest warden shall appoint at least one fire warden in each organized town and shall keep a register of names and address.

The oath of office of the fire warden shall be filed with the state forest warden.

Duty of fire warden, pay and liability.

Wis. Stats., sec. 1636c, p. 1186.

Notices to be posted; report.

On suitable blanks furnished by the state warden the fire warden shall conspicuously post notices.

They shall report to the state forest warden as to all fires, and on or before Dec. 1 succeeding each general election shall report to the Governor a summary of such facts.

Wis. Stats., sec. 1636d, p. 1186.

Allowance to state warden and deputy.

The commissioners of lands shall audit all the accounts of the state forest warden and his deputy, and when allowed by them and approved by the Governor they shall be audited by the Secretary of State, who shall issue his warrant therefor, but in no case shall such expense and compensation exceed \$300 per annum.

Wis. Stats., sec. 1636e, p. 1186, amended by ch. 432, L. 1901.

Further duties.

For additional duties of the state forest warden see this section.

Wis. Stats., sec. 1816a, p. 1340.

Postage, stationery; Blue Book.

He shall be furnished with necessary stationery and postage, and shall have one copy of the Blue Book.

Wis. Stats., sec. 121, p. 226; sec. 169, p. 258; sec. 290, p. 301.

DISBURSEMENTS IN THE DEPARTMENT OF THE LAND COMMISSIONERS

For the year ending Sept. 30, 1900.

Salaries, including salaries under section 186, R. S., swamp-land claims, salaries and expenses paid under sec. 190 of R. S., salary of Forest Wardens, per diem and expenses of Commissioner and fee for examining state lands	\$20,225 97
Printing, including cost of paper and waste and printing of Forest Warden	446 18
Postage and P. O. box rent, including postage of Forest Warden	29 74
Telephone and telegrams, including telegrams of Forest warden.....	29 71
Expressage	35
Stationery, per report Superintendent Public Property	70 63
Draughtsman	1,200 00
Disbursements for advertising lands	238 80
Total	\$20 950 87

COMMISSIONERS OF PUBLIC PRINTING.

While the statutes are not entirely clear as to the intention of the legislature as to printing, and while all laws on the subject do not in express words define the duty of the Commissioners, it is believed that the following summary of the acts governing their duties will be sufficiently comprehensive for the purposes of this pamphlet.

The system provided to be established by chapter 433 of the laws of 1901, see ante, page 368, contemplates that all of the printing, binding etc., will be charged to the department, board, society or institution receiving it, together with the paper used and waste sustained and allowed as provided by law, and that these entries will be made with such promptness that expense of this character will at all times appear on the records of the Auditor.

COMMISSIONERS OF PUBLIC PRINTING.

Commissioners, who are.

The Secretary of State, Treasurer and Attorney General are the commissioners.

Wis. Stats., sec. 296, p. 303.

To advertise for proposals.

They shall during the first week in June each even-numbered year advertise in six (6) newspapers for printing proposals as herein required.

Wis. Stats., sec. 297, p. 303.

Advertisement what to contain.

Said advertisement shall contain maximum legal prices and forms of bids.

Wis. Stats., sec. 298, p. 303.

For other requirements consult page 304.

For maximum prices and conditions see pages 303 and 304.

Wis. Stats., sec. 299, p. 303.

Contract, how let.

The contract shall be let to the bidders who offer to do the work at the greatest uniform discount from the maximum legal prices, conditions, guaranty and procedure as to bids.

Wis. Stats., sec. 300, p. 304.

Const., art. 4, sec. 25, p. 93.

Contract; bond.

Details of execution of printing contract and bond.

Wis. Stats., sec. 302, p. 304.

Forfeiture of deposit; breach of contract.

Procedure is given in this section in case of failure of bidders to enter into contract.

Forfeiture of deposit.

Wis. Stats., sec. 303, p. 305.

Reletting contract.

Reletting of contract provided for in case of breach of contract.

Wis. Stats., sec. 304, p. 306.

Advertisement.

The commissioners shall, during the first week in February and August each year and at other times when they deem it necessary, advertise in two newspapers in Wisconsin, as herein required for paper required.

Wis. Stats., sec. 305, p. 306.

Classes of paper, separate bids.

Paper must be clear and uniform in color and be divided into two classes, as herein provided, and be bid for separately.

Wis. Stats., sec. 306, p. 306.

Samples.

Samples of qualities desired shall be provided for by bidders.

Wis. Stats., sec. 307, p. 306.

Paper bids, bond.

Details of execution of paper contract and bond.

Wis. Stats., sec. 308, p. 306.

Paper contract how awarded.

Wis. Stats., sec. 309, p. 307.

When to be rejected.

The commissioners shall carefully examine the paper received to see if it corresponds to samples furnished. If it fails to equal such samples the commissioners shall notify the contractor and reject the paper.

Wis. Stats., sec. 311, p. 307.

Printing bids; guaranty.

Bids shall be deposited with the Secretary of State.

A certificate of the Treasurer certifying that he has received from the bidder \$1,000 in money or U. S. bonds must accompany a bid before it shall be considered. Bids shall be accompanied by a written guaranty signed by two or more freeholders in the sum of \$5,000 to the effect that they guarantee the bidder will, if his bid be accepted, execute the contract and bond required by law within the time commissioners may prescribe.

Wis. Stats., sec. 301, p. 304.

Order for paper; waste or conversion.

Ten per cent. shall be allowed the state printer for waste on jobs of 10 quires or less and 5 per cent. on jobs of more than 10 quires.

Wis. Stats., sec. 313, p. 307.

Who may make printing orders.

Printing orders shall be made by the heads of departments requiring work and shall be transmitted through the Secretary of State. No order shall be given for work not absolutely needed nor in quantities greater than absolutely required.

Wis. Stats., sec. 314, p. 308.

Duty of legislative clerks.

Duty of legislative clerks in connection with orders for printing.

Wis. Stats., p. 315, p. 308.

Bills, etc., how printed.

Provides as to the printing of bills, joint resolutions and memorials.

Wis. Stats., sec. 316, p. 308.

Daily journals; appendix.

The printing of daily journals and appendix provided for.

Wis. Stats., secs. 317, 318, p. 308.

Public documents.

What the public documents shall contain.

Wis. Stats., sec. 319, p. 309.

Reports what to contain; how printed, what to be omitted.

The Governor shall transmit reports received by him to the commissioners, who shall strike out therefrom all parts not actually necessary, in their judgment, to be printed for the information of the people and to order the publication of the remainder in condensed form as the commissioners may prescribe.

Wis. Stats., sec. 333, p. 313; sec. 334, p. 313.

The part so stricken out shall be copied in a book by the Secretary of State and returned to the officers or boards making the reports.

Commissioners' report.

The commissioners shall make a biennial report to the Governor and the report shall be bound with the reports of the Secretary of State.

Wis. Stats., sec. 335, p. 313.

An additional report is provided by this act to be made to the Governor before January 10, each odd-numbered year.

Ch. 97, L. 1901.

Size of reports.

Limitations of number of pages of the biennial reports of the various officers and boards.

Wis. Stats., sec. 335b, p. 314.

Number of copies.

Limitations of number of copies on orders of commissioners through the Secretary of State.

Wis. Stats., sec. 335b, p. 314.

How bound.

This section provides how reports shall be bound.

Wis. Stats., sec. 335d, p. 315.

Reports for Board of Agriculture, Horticultural Society, Dairy-men's Association, Experiment Station of University of Wisconsin, Conference of Charities and Reform.

Wis. Stats., sec. 335e, p. 315.

Enlargement of reports, etc.

In no case shall the number of printed pages of any of the reports or transactions provided by law exceed the maximum number specified except upon written request of the officer of the department submitting the same and upon the written approval of the majority of the commissioners.

Wis. Stats., sec. 337, p. 316.

Geographical and Natural History Survey.

This act permitted the Commissioners of Printing to print the reports of the Survey.

Ch. 297, L. 1897.

Printing for Historical Society.

Relates to printing and binding that may be done for the Historical Society.

The commissioners shall approve of the matter printed.

Wis. Stats., sec. 340, p. 316; sec. 375, p. 327.

Assessment and election laws.

Provides for printing assessment and election laws.

Wis. Stats., sec. 342, p. 317.

Supreme court reports; contract for publication; price of reports.

Relates to the publication of supreme court reports.

Wis. Stats., sec. 347b, p. 318, amended by ch. 118, L. 1901.

Free Library Commission, office, printing and incidental expenses.

The state printer, upon the order of the commissioners, shall print such circulars, labels and blanks as may be required by the Free Library Commission.

Wis. Stats., sec. 373b, p. 326.

The new section added by this act directs the state printer to furnish the secretary of the Free Library Commission with copies of all state documents.

Ch. 168, L. 1901.

University reports and printing thereof.

The commissioners may order such paper and binding, on and with which the reports of the University Regents shall be printed and bound, with the approval of the Governor. Also the Washburn Observatory reports.

Wis. Stats., sec. 383, p. 332.

Adjutant General, reports of officers' convention.

Adjutant General may procure printing of report of officers' convention upon order of the commissioners.

Wis. Stats., sec. 648, p. 461.

Dairy and Food Commissioner's printing.

Provides that the Dairy and Food Commissioner shall be furnished such printing as may be necessary.

Wis. Stats., sec. 1410, p. 1058.

State Veterinarian, bulletins.

Relates to the printing of the report and bulletins of information issued by the State Veterinarian.

Wis. Stats., sec. 1492e, p. 1103.

Board of Arbitration, report.

Relates to the printing of the report of the Board of Arbitration and Conciliation.

Wis. Stats., sec. 1729½, p. 1250.

Attorney General may have cases printed.

The Attorney General may require to be printed by the state printer copies of or abstracts from the records and his argument and brief.

Wis. Stats., sec. 2414, p. 1741.

This act provides that the report of the Attorney General be published by the commissioners of public printing in the public documents of the state, and they shall also print 1,000 copies to be bound in cloth to be distributed as herein provided.

Ch. 94, L. 1901.

They shall publish the opinions of the Attorney General in accordance with this act and deliver the documents to the Attorney General as herein provided.

Ch. 161, L. 1901.

Commissioners of taxation.

The printing for the commissioners of taxation shall be done by the commissioners of public printing.

Ch. 206, L. 1899, sec. 8, p. 243.

Printing for Board of Health, as herein provided.

Wis. Stats., sec. 1407, p. 1653.

Printing for Academy of Sciences, etc.

Printing for Academy of Sciences, Arts and Letters 2,000 copies of transactions; also binding not exceeding \$150 cost.

Wis. Stats., sec. 341, p. 317, ch. 186, L. 1901.

The commissioners of public printing shall, in connection with the other printing of the Board of Agriculture, supply secretary of said Board with necessary blanks and cause to be printed in pamphlet form the report of said Board, provided that not more than 5,000 copies are printed.

Ch. 79, L. 1901.

The state printer shall print biennially under the direction of the commissioner of the Bureau of Labor in such year as the legislature shall meet in regular session, for the use of the senate and assembly a book to be denominated the "Blue Book of Wisconsin."

He shall also, under the direction of the commissioner, print a sufficient number of copies to make the distribution herein provided.

Ch. 405, L. 1901.

The commissioner shall cause to be printed on Saturday of each week a sheet showing lists received from each employment office.

Ch. 420, L. 1901.

The Board of Control shall cause to be printed by-laws, rules and regulations as herein required.

Wis. Stats., sec. 561j, p. 409.

The state printer shall print for the use of the justices of the supreme court so many decisions and opinions, and at such times, as shall be directed by them.

Wis. Stats., sec. 2410, p. 1740.

The state printer shall deliver to the Secretary of State in good order all copies of work ordered to be printed, ruled or bound by him or any other state officer or agent.

Provides for the contract for printing supreme court decisions.

Wis. Stats., sec. 323, p. 310; sec. 347b, p. 318, amended by ch. 118, L. 1901.

The commissioners of public printing shall print 1,000 copies of the annual convention of National Guard officers.

Ch. 228, L. 1901.

A committee, consisting of two members of the senate and three of the assembly, shall be called the committee of printing, and shall have power to examine all papers and documents on file in the office of the Secretary of State and to examine all printed matter of the state.

Wis. Stats., sec. 106, p. 233.

EXPENSE.

The expenses of publishing, public printing, notices during the year ending Sept. 30, 1900, was \$692 53

See page 191 in the report of the Secretary of State for the year ending Sept. 20, 1900.

STATE BOARD OF CANVASSERS.

Board of canvassers.

The Secretary of State, State Treasurer and Attorney General shall constitute the Board of State Canvassers, two of whom shall be a quorum, and if only one of said officers attend on the day appointed for a meeting of such board, the clerk of the Supreme Court, on being notified by said officer shall attend, and with him shall form the board. When a member of said board is a candidate for an office as to which votes are to be canvassed, the chief justice, upon the request of any opposing candidate, shall designate some other officer or judge, who shall act as herein provided; such officer or judge shall receive not exceeding \$15 per day for each day engaged.

Wis. Stats., sec. 93, p. 217.

Missing returns.

The Secretary of State, upon receipt of the certified statements of votes in the counties from clerks, shall record the result and file and preserve statements. If any clerk neglects to forward to the Secretary of State any such statement such Secretary shall obtain the same from the Governor or State Treasurer, if received by either of them, and if not he may by mail or telegraph require such statement from such clerk. If from any cause no such statement is obtained within thirty days after an election the Secretary of State may dispatch a messenger to obtain the same.

Wis. Stats., sec. 94, p. 217.

Meeting of board; corrected returns; statement of result.

For the purpose of canvassing result of elections other than for president and vice-president, the secretary shall appoint a meeting of the board to be held at his office on the 15th of December next after a general election and within forty-five days after a special election.

Wis. Stats., sec. 94a, p. 217.

NOTE.—Sections 94b, 94c, 94d and 94e, page 218-220, provides the details of the procedure of the board and shows how the canvass is made.

Board of deposits.

Any national or state banking corporation which shall be approved by a board, to be known as the "Board of Deposits," consisting of the Commissioners of Public Lands and the Governor, may upon filing a bond as provided and upon compliance with the requirements of the law, become a state depository.

The board receives no compensation. The record of the board proceedings is kept by the Secretary of State.

Wis. Stats., sec. 160a, p. 253.

Bond of depository.

Every state depository, before it shall be entitled to receive any state moneys, shall file with the State Treasurer a bond to the state of Wisconsin approved by the Governor.

Bank Examiner may be required to investigate and report concerning condition of any such depository.

Wis. Stats., sec. 160b, p. 253.

Interest.

The board shall from time to time fix the rate of interest to be paid by said depositories upon state moneys deposited with them and cause notice thereof to be published in the official state paper. The rate of interest, until changed by said board, shall be 2½ per cent. per annum.

Wis. Stats., sec. 160c, p. 253.

Treasurer's liability.

The Treasurer may deposit with any depository which has fully complied with all requirements of law any state moneys in his hands or under his official control, not exceeding limit prescribed and sums so on deposit shall be deemed in treasury, and the Treasurer shall not be liable for any loss thereof resulting from the failure or default of any such depository without fault or neglect on his part or on the part of his assistants or clerks. The amount at any time on deposit with any depository shall not exceed its actual paid-up capital, nor one-half of the penalty of the bond filed by it, nor the amount prescribed by the board of deposit.

Wis. Stats., sec. 160d, p. 253.

Additional bond from depository.

The board shall not approve the bond of any such corporation until fully satisfied that said bond is good and sufficient and that the corporation is prosperous, financially sound and has, unimpaired, the paid-up capital claimed by it. The board may at any time require any state depository to furnish a new or addi-

tional bond and revoke their designation and approval thereof, and immediately upon such revocation shall forthwith withdraw all state moneys therefrom.

Wis. Stats., sec. 160e, p. 254.

Return of deposits and interest.

Every depository shall, on the first day of each month, and oftener if required, file with the Secretary of State a sworn statement of the amount of public moneys deposited with it, and shall within ten days after the first day of each January, April, July, and October, make a full statement of all deposits and payments of state moneys during the preceding quarter, together with a computation and statement of the interest earned thereon, computed upon the daily balance on deposit, which interest shall thereupon be added to and become part of the deposit balance; such statement shall be accompanied by an affidavit of the president and cashier, as herein provided. The total interest paid by all depositories shall be apportioned by the State Treasurer among, added to and become a part of the following funds:

General fund.

School fund.

School fund income.

The University fund.

The University income fund.

Normal School fund.

Normal School fund income.

The Agricultural College fund.

The Agricultural College fund income.

According to the average amount of each such fund on hand the first day of each month.

No expense is incurred by this board.

Wis. Stats., sec. 160f, p. 253.

BANK EXAMINER.

This officer is appointed by the State Treasurer, with the approval of the Governor. His duty is to visit banks of the state without notice, examine their resources and determine the accuracy of their statements.

To assist him in his duties the law provides for a deputy examiner and an assistant deputy examiner, a chief clerk and a clerk and stenographer.

The provisions of the law which follow set forth the duty and power of this state officer, including his duty with reference to the Building and Loan Associations.

Appointment, oath and bond.

The State Treasurer may appoint, with Governor's approval, a Bank Examiner to supervise the banking institutions of the state, to be a skillful bank accountant, thoroughly conversant with the business of banking. Term, five years and until his successor qualifies. Vacancies to be filled by appointment for the balance of term. Before entering upon duties, he shall take the constitutional oath and file the same with the Secretary of State and execute a bond for \$25,000 with sureties, approved by the Governor for the faithful discharge of his duties. Said Bank Examiner shall appoint two deputies and may at any time revoke such appointment. Such deputies shall file the same oath and like bond, perform the same duties and exercise the same powers and authority as the Examiner.

Wis. Stats., sec. 2023h, p. 1522, amended by ch. 467, L. 1901.

Examination of depositories.

He may be required to examine the state depositories.

Wis. Stats., sec. 160b, p. 253.

Seal, Office, papers, report, etc.

The examiner shall have an official seal, a description of which with impression thereof and a certificate of Governor's approval to be filed with the Secretary of State. He shall occupy an office in the capitol, where he shall file and keep all papers, reports and public documents received.

Wis. Stats., sec. 2023j, p. 1522.

Clerk and stenographer.

He may, with the consent of the Treasurer and Governor's approval, appoint a chief clerk and a person as clerk and stenographer to assist in office duties. The chief clerk shall have power, under like conditions and restrictions which are required of the Bank Examiner and deputies to make examinations of banks at such times as the clerical work will permit.

Wis. Stats., sec. 2023k, p. 1522, amended by ch. 69, L. 1899.

The examiner shall visit, without notice, once each year and at other times deemed necessary, every state bank, examine its resources and liabilities, ascertain fully its financial condition, determine the accuracy of the last official statement in pursuance of law and examine into any transaction he may deem foreign to a legitimate banking business or a violation of laws; provided, that if said Bank Examiner shall be interested in any bank the Treasurer, his assistant or some other competent person specially designated shall act as such examiner. Examiner shall have free access to all records, books, securities and papers showing the resources and liabilities of banks and may examine on oath any one connected with or doing business with. The substance of such examination shall be reduced to a written statement and subscribed by the person examined, and filed in the examiner's office. He may inform the directors of bank of any fact or matter relating thereto disclosed to him in his examination. Any person who shall wilfully and corruptly swear to any material matter or thing in any such examination shall be punished as provided by section 4471.

Wis. Stats., sec. 2023 l, p. 1522.

Subpoenas, oaths.

He may issue subpoenas and administer oaths.

Wis. Stats., sec. 2023n, p. 1523.

Report of banks.

Every such bank shall make to the examiner upon request not less than three times yearly, a report in the form which shall conform to the form furnished by the U. S. comptroller of currency for national banks as nearly as practicable.

Wis. Stats., sec. 2023o, p. 1523.

NOTE.—For details of such reports consult sections referred to in margin.

Penalty for failure to report.

Provides penalty for failure of banks to report as provided.

Wis. Stats., sec. 2023p, p. 1524.

Capital impaired.

When examiner believes that the capital of any bank is impaired or reduced to endanger depositors' interests, he shall have power to examine said bank and ascertain its condition, and if he deem it proper he shall by notice in writing require such bank to make good any deficiency. If bank refuses or neglects for thirty days after such notice to make good deficiency, the examiner shall cause to be published in manner herein provided a notice of such refusal or neglect, together with a statement of the condition of said bank.

Wis. Stats., sec. 2023q, p. 1524; ch. 317, L. 1901.

Examiner's report.

On the second Monday in December, annually, the examiner shall report to the Governor, to be published and shall exhibit:

1. A tabular summary of the condition of every bank from which report has been received during the twelve months preceding, showing its condition as herein provided.
2. A statement of banks closed since his last report, the financial condition and amount paid creditors.
3. The names of persons interested in each of said banks and the amount of the capital owned by each.

On the first of January, each year, he shall make to the Treasurer a statement of expenses of his office and the amount of fees received and penalties collected during the year.

Wis. Stats., sec. 2023r, p. 1524.

Secrecy.

The examiner and every employee of his office shall be sworn to keep secret all facts disclosed and information obtained in any examination except so far as officially required. They shall not disclose the names of any debtor of any bank nor anything relating to any private accounts or transactions therewith, except in case of proceedings in court for liquidation. Violation of this section shall subject the person or persons offending to forfeiture of office and to the payment of a fine from \$100 to \$1,000, or imprisonment in the state prison, or both.

Wis. Stats., sec. 2023s, p. 1524.

Postage, stationery, Blue Book.

He is allowed one copy of the Blue Book, postage and stationery for his office.

Wis. Stats., sec. 121, p. 236; sec. 169, p. 258; sec. 290, p. 301.

Compensation.

The salary of the examiner shall be \$3,000 annually and traveling expenses.

Deputy examiner, \$2,000 annually.

Assistant deputy examiner, \$1,800 annually and traveling expenses.

Chief clerk, \$1,500 annually.

Clerk and stenographer, \$1,200 annually.

Actual and necessary traveling expenses are also allowed to Bank Examiner and deputy.

Wis. Stats., sec. 170, p. 262, amended by ch. 299, L. 1899, and ch. 467, L. 1901.

Provides conditions under which the Secretary of State as Auditor may approve vouchers for transportation.

Ch. 426, L. 1901.

Compensation not to exceed \$200 for compiling bank statements.

The Secretary of State is authorized to sign a warrant for not over \$200 per year for compiling bank statements in favor of persons named by the Treasurer.

Ch. 347, p. 636, L. 1899.

Incorporation.

Articles of incorporation of building and loan associations shall be filed with examiner, who may issue certificate of incorporation after articles and by-laws have been approved by Attorney General. Fee for certificate is \$10.

Amendments, \$5, to be paid to the Bank Examiner and by him paid into the treasury.

Wis. Stats., sec. 2010, p. 1510.

Building and loan associations; duty of Bank Examiner.

All associations formed hereunder or authorized to transact in this state a business similar to that authorized herein to be done, shall be under the examiner. Every such corporation, at the end of its fiscal year, shall report of its business done the preceding year and of its condition at the close thereof, in such form and containing such information as said examiner requires and shall file with him a verified copy within thirty days with an affidavit of the secretary of said association, as herein provided.

If any such association fails or refuses to furnish the report required it shall forfeit \$10 per day for each day report is withheld, and examiner may maintain an action to recover such penalty to be paid in the treasury.

Wis. Stats., sec. 2014-12, p. 1513.

Examinations.

Once every two years the examiner shall examine such association and shall have full access to and may compel the production of all their papers, securities and moneys, administer oaths to and examine their officers and agents as to their affairs.

Wis. Stats., sec. 2014-14, p. 1514.

NOTE.—For details as to further proceedings sections noted in margin should be consulted.

Ouster; winding up business.

Should examiner find such association conducting its business contrary to law he shall take actions as herein provided.

Wis. Stats., sec. 2014-14, p. 1514.

Examiner's report.

The examiner shall annually after the reports have been received, make a report to the Governor of the general conduct and condition of all building and loan associations in this state, including the information contained in such reports, arranged in tabular form, together with such further information as herein required.

One thousand copies of said report shall be printed; each local association shall be entitled to three copies, the remainder to be for general distribution.

Wis. Stats., sec. 2014-16, p. 1514.

This act provides for an additional report to be made to the Governor before January 10, each odd-numbered year.

Ch. 97, L. 1901.

Relates to the duty of the Bank Examiner as to foreign building and loan associations.

Wis. Stats., secs. 2014-17, 2014-26, pp. 1514-1517.

Provides for supervision and control of investment, loan, benefit, trust or guarantee companies.

Ch. 216, p. 356, L. of 1899.

Printing.

Two thousand copies of the report of the examiner shall be printed.

Wis. Stats., sec. 335a, p. 314.

DISBURSEMENTS FOR THE DEPARTMENT OF THE BANK EXAMINER.

For the year ending Sept. 30, 1900.

Salaries of four (4) officials and employees	\$7,700 00
Travelling expenses of three (3) persons	2,755 84
Publishing and printing, including cost of paper and waste, per report of	
Commissioners of Public Printing	342 90
Postage and P. O. box rent	342 90
Stationery, per report Superintendent Public Property	54 33
Telephone, telegrams and expressage	41 27
Total	\$12,278 15
Disbursements for publishing reports	296 39

Pages 161, 162, 488 and 500 in the report of the Secretary of State for the year ending Sept. 30, 1900.

COMMISSIONER OF BUREAU OF LABOR AND INDUSTRIAL STATISTICS.

The Commissioner of this Bureau, who is appointed by the Governor, is directed and empowered by law to "collect and publish statistical and other information relating to manufacturing industrial classes and material resources of the state." His investigations embrace the preservation of life and health in factories and work shops, the employment of women and children, the hours of labor, the condition of employees, the cost of the necessities of life, the relations of capital and labor, the causes of strikes and lockouts, "and other kindred matters pertaining to the welfare of industrial interests and classes." He is also charged with the duty of enforcing the factory laws of the state.

The laws effecting these topics and giving the duties of the Commissioner and Factory Inspectors are numerous and are not all included in the following compilation. Only the laws setting forth generally the authority of the Commissioner and the other officers of the Bureau are thought to be appropriate in this connection.

BUREAU OF LABOR AND INDUSTRIAL STATISTICS.

Office and supplies.

To occupy rooms in the capitol and be allowed such printing and supplies as may be necessary for the performance of duties of the officers of the bureau.

Wis. Stats., sec. 1021b, p. 782.

Postage; stationery.

It shall be provided with necessary postage and stationery.

Wis. Stats., sec. 169, p. 258; sec. 290, p. 301.

Appointment of Commissioner.

The Governor shall appoint the Commissioner, with the consent of the Senate for a term of two years, beginning the first Monday in February in the year appointed. Vacancies shall be filled for unexpired term.

Wis. Stats., sec. 1021c, p. 782.

Salary.

The Commissioner's salary shall be \$2,000 annually, with necessary traveling expenses.

Wis. Stats., sec. 1021d, p. 782, amended by ch. 152, L. 1899.

This act provides conditions under which the Secretary of State as Auditor may approve vouchers for transportation.

Ch. 426, L. 1901.

Assistants' salaries.

He may appoint a deputy at \$1,500 annually, and a clerk at \$1,300 annually.

A clerk and typewriter at \$720 annually.

A clerk and janitor at \$744 annually.

One factory inspector at \$1,200 annually and traveling expenses outside of Milwaukee.

One assistant factory inspector at \$1,000 annually.

Seven assistant factory inspectors at \$1,000 annually and traveling expenses.

Wis. Stats., sec. 170.

Provides for an additional factory inspector who shall be a woman.

Ch. 409, L. 1901.

Inspector may rent an office in Milwaukee at state expense but not to exceed \$300 annually.

Commissioner may expend \$50 for books and periodicals for bureau library.

Seal; oaths; witness' fees.

Provides as to seal, oaths, etc.

Wis. Stats., sec. 1021j, p. 784.

Report.

Commissioner shall report to the Governor at the end of the biennial term.

Wis. Stats., sec. 1621k, p. 785.

Provides for an additional report.

Ch. 97, L. 1901.

Printing.

The report of the Bureau of Labor shall be limited to 300 pages and 10,000 copies shall be printed.

Wis. Stats., sec. 335b, p. 314.

Blue Book.

This act authorizes the Commissioner to compile, prepare and cause to be printed by the State Printer biennially in such year as the Legislature shall meet in regular session, for the use of the Senate and Assembly, a book to be denominated the "Blue Book" of the State of Wisconsin.

He shall cause to be printed a sufficient number of copies to make the distribution herein provided.

Ch. 405, L. 1901.

NOTE.—Where the state laws in express terms confer other powers upon or prescribe additional duties for the bureau officers, the provisions have been incorporated in the following analysis:

Powers.

- Commissioner. May prescribe blank forms and transmit them to employers to be filled out under oath and returned to him. Wis. Stats., sec. 1021i.
- Commissioner or Deputy. May administer oaths, take testimony and subpoena witnesses. Wis. Stats., sec. 1021j.
- Commissioner, Deputy or Factory Inspector. May enter any factory, mercantile establishment or workshop to obtain facts and to examine means of escape from fire and provisions made for health and safety and seats for females. Wis. Stats., sec. 1021f, amended by ch. 158, L. 1899.
- May examine hotels and lodging or boarding houses to see if equipped with fire escapes, and may post in such places the laws relating to fire escapes with his official statement as to whether such laws are complied with. Wis. Stats., sec. 1021g.
- May post up in any factory or workshop the laws relating to matters pertaining to health and safety of artisans or that elevators are unsafe and may order dangerous machinery enclosed or guarded. Wis. Stats., sec. 1021h.
- May demand to be shown affidavits required by this act for children under sixteen. Ch. 182, sec. 2, L. of 1901.
- May demand inspection of register of names and addresses required to be kept and may visit and inspect all places covered by this (child labor) act. Ch. 182, sec. 4, L. 1901.
- May demand physician's certificate of physical fitness for those who seem unfit to work. Ch. 182, sec. 5, L. 1901.
- May in their discretion issue permit to minors over twelve under conditions herein named. Ch. 182, sec. 6, L. 1901.
- May file charges against any district attorney who refuses or neglects to do his duty as herein stated. Wis. Stats., sec. 1021l.
- Commissioner and Factory Inspector. May require necessary changes or any process of cleaning, painting or whitewashing in rooms under this act that they deem essential to assure freedom from stench, filth and vermin or any condition liable to impair health or breed disease. Ch. 239, sec. 3, L. 1901.
- May issue special written permits as herein required to regulate number of employes in limited air space where there is suitable light in sweat-shops. Ch. 239, sec. 1, L. 1901.
- May revoke such license if sanitary conditions improper. Ch. 239, sec. 1, L. 1901.
- May inspect and examine rooms in sweat-shops to ascertain if garments, etc., are clean and free from contagious diseases. Ch. 239, sec. 1, L. 1901.
- May require rooms, used to make garments, to be separate from and have no opening into living or sleeping rooms and that no such room shall contain beds, bedding or cooking utensils. May require suitable closet arrangements for each sex, as herein provided. Ch. 239, sec. 3, L. 1901.

May demand inspection and copy of register of names and addresses of persons to whom articles and materials are given out to be made. Ch. 239, sec. 4, L. 1901.

Factory Inspector. May enforce all the provisions of this (Cigar Factory) act. Ch. 79, sec. 9, L. 1899.

Duties.

Duties Generally.

Commissioner. Shall collect, collate and publish information relating to labor and the material resources of the state.

Shall examine into relation between capital and labor and causes of labor troubles.

Shall examine into employment of women and children and hours of labor.

Shall examine into the protection of life and health and means of escape from factories and shops.

Shall examine into educational, sanitary, moral and financial condition of workers.

Shall examine into cost of all necessities of life and all kindred subjects pertaining to the welfare of industrial interests and classes. Wis. Stats., sec. 1021c.

Shall prepare and furnish blank applications for licenses. Ch. 239, sec. 1, L. 1901.

Shall have posted a new statement setting forth the fact when notified that hotels, lodging or boarding houses are equipped with fire escapes. Wis. Stats., sec. 1021g.

Shall recommend to the Governor for appointment a superintendent for free employment offices, as herein provided for. Ch. 420, sec. 2, L. 1901.

Shall cause to be printed on Saturday of each week a sheet showing lists received from each such employment offices and shall mail copies to each superintendent and factory inspector as herein provided.

Shall publish annual reports of each such superintendent. Ch. 420, sec. 1, L. 1901.

Commissioner, Deputy or Factory Inspector. Shall give facts to District Attorney if offense or neglect is not remedied in thirty days after written notice. Wis. Stats., sec. 1021f, amended by ch. 158, L. 1899.

Shall give written notice to owner or occupant where laws herein referred to are violated. Wis. Stats., sec. 1021f, amended by ch. 158, L. 1899.

Shall keep a record of buildings examined as to fire escapes, etc., and posted. Wis. Stats., sec. 1021g.

Shall examine freight and passenger elevators and condemn those defective by serving written notice as herein provided. Wis. Stats., sec. 1021h.

Shall see that in every manufacturing establishment speaking tubes or electric bells connect engineer's room with rooms where machinery is operated and shall give notice to the proper party who fails to provide such means of communication. Wis. Stats., sec. 1021h.

Commissioner and Factory Inspector. Shall enforce the provisions as to fire escapes. Ch. 349, sec. 4, L. 1901.

After ninety days' written notice, shall file written statement with the district attorney in cases where fire escape laws are violated. Ch. 349, sec. 4, L. 1901.

Shall visit and inspect places and enforce provisions covered by this (child labor) law and prosecute violation of it. Ch. 182, sec. 4, L. 1901.

Shall make an inspection of rooms where license is applied for and grant a license if conditions are as herein provided. Ch. 239, sec. 1, L. 1901.

Shall report to the local Board of Health when he finds unsanitary conditions in rooms used for making goods named in this act. Ch. 239, sec. 5, L. 1901.

Shall notify owner or agent if rooms or apartments are unlawfully used as herein provided for. Ch. 239, sec. 6, L. 1901.

Factory Inspector. Shall make a complaint in writing before a police justice or magistrate if he finds that persons operating such factories or workshops have failed to comply with this act regulating operation of emory wheels, etc. Ch. 189, L. 1899.

Shall enforce provisions of this act regulating manufacture of cigars and shall notify employers in writing thirty days before prosecution of violation of sections 2, 3 and 4, as herein provided. Ch. 79, sec. 9, L. 1899.

Shall cause an inspection to be made of scaffolding and other devices used in construction and repairing of buildings when complaint is made of unsafe conditions. Ch. 257, sec. 2, L. 1901.

Shall prohibit the use thereof if unsafe; require the same to be altered to avoid danger and notify persons responsible.

Shall attach certificate that examination has been made as herein provided. Ch. 257, sec. 2, L. 1901.

Shall do all he reasonably can to assist in securing positions for applicants. Ch. 420, sec. 4, L. 1901.

DISBURSEMENTS ON ACCOUNT OF THE BUREAU OF LABOR STATISTICS.

For the year ending Sept. 30, 1900.

Salaries of officials and clerks	\$6,194 49
Travelling expenses of two (2) persons	617 70
Total printing, including that of the Department of Factory Inspection and cost of paper and waste, per report Commissioners Printing.....	1,855 49
Postage and P. O. box rent	1,182 10
Telegrams	26 72
Expressage	113 30
Stationery, per report Superintendent Public Property	160 36
Total	\$10,149 63

Pages 162, 163, 488 and 500 in the report of the Secretary of State for the year ending Sept. 30, 1900.

ADDITIONAL DISBURSEMENTS ON ACCOUNT OF FACTORY INSPECTION

For the year ending Sept. 30, 1900.

Salaries of factory inspectors, seven persons	\$7,200 00
Travelling expenses of same	4,842 21
Office rent in Milwaukee	300 00
Total	\$12,342 21

Page 162 in the report of the Secretary of State for the year ending Sept. 30, 1900.

DAIRY AND FOOD COMMISSIONER.

Appointment, term, vacancy, supplies, assistants and report.

The Commissioner shall be appointed by the Governor, by and with the advice and consent of the Senate, for a term of two years from the date of his appointment and until his successor qualifies.

Vacancies shall be filled by the Governor, with the approval of the Senate if it be in session; if not, at the next session held after such appointment.

Such Commissioner may, with the advice and consent of the Governor, appoint an assistant and a chemist. He may also appoint an agent for the inspection of milk, dairies, factories and creameries and to assist in the work of the Dairy and Food Commission at such times as may be required. He may also appoint a stenographer and confidential clerk. The Commissioner shall be furnished with a suitable office in the capitol and with such supplies and printing as may be necessary.

He shall as soon as practicable after the 30th of September in each even-numbered year, make a report to the Governor.

Wis. Stats., sec. 1410, p. 1058.

This act provides an additional report to be made to the Governor each odd-numbered year on or before January 10.

Ch. 97, L. 1901.

The report shall be limited to 350 pages and 20,000 copies shall be printed.

Wis. Stats., sec. 335b, p. 314.

His power and duties; legal assistance.

He shall enforce the laws regarding the production, manufacture and sale of dairy products and has power to appoint, with the approval of the Governor, special counsel to prosecute or assist in the prosecution of any case arising under the provisions of these statutes.

Wis. Stats., sec. 1410a, p. 1059.

Analyses.

Submission to him of articles for analysis, is provided for in this section.

Wis. Stats., sec. 1410c, p. 1060.

This act to his duty as to adulteration of flax or linseed oil.

Ch. 234, p. 391, L. 1899.

Farmers' institutes; expense of analyses.

The Governor may authorize him or his assistants, when not engaged in the performance of other official duties, to give such aid in farmers' institutes, dairy and farmers' convention and the Agricultural department of the State University, as may be deemed advisable.

The Commissioner may incur an annual expense, not to exceed \$600 for the necessary expenses of making the analyses in the foregoing sections, the accounts for which, when verified and itemized, and approved by the Governor, shall be audited by the Secretary of State.

Wis. Stats., sec. 1410d, p. 1060.

Obstructing Food Commissioner.

Penalty provided for obstructing Food Commissioner in his duties.

Wis. Stats., sec. 4607h, p. 2791.

Postage; stationery; blue Book.

He is allowed postage and stamped envelopes for his official correspondence and stationery for his office and one copy of a Blue Book.

Wis. Stats., sec. 121, p. 236; sec. 169, p. 258; sec. 290, p. 301.

Salaries.

Salaries paid in this department:

Dairy and Food Commissioner, \$3,000 annually.

Assistant Dairy and Food Commissioner, \$1,600 annually.

Chemist, \$1,800 annually.

Stenographer and clerk, \$900 annually.

Commissioner, his assistant and the chemist are allowed their actual expenses incurred in discharge of duties, on the approval of the Governor.

Wis. Stats., sec. 170, p. 261.

DISBURSEMENTS IN THE DEPARTMENT OF THE DAIRY AND FOOD
COMMISSIONER.

For the year ending Sept. 30, 1900.

Salaries of five (5) officials and employees	\$3,706 10
Traveling expenses of four persons	2,281 51
Printing, including cost of paper and waste, per report Commissioners	
Printing	267 00
Postage and P. O. box rent	267 00
Telephone and telegrams	93 39
Expressage	228 97
Stationery, per report Superintendent Public Property	41 28
Total	\$11,791 33

Pages 163, 488 and 500 in the report of the Secretary of State for the year ending Sept. 30, 1900.

Laboratory expenses:

Rent	\$250 00
Water rent	20 59
Supplies	154 54
Total	\$425 13

Page 163 in the report of the Secretary of State for the year ending Sept. 30, 1900.

BOARD OF CONTROL.

The Board of Control, consisting of five (5) members appointed by the Governor, has entire charge of all reformatory, charitable and penal institutions of the state as follows:

State Hospital.
Northern Hospital.
School for Deaf.
School for Blind.
Industrial School for Boys.
State Prison.
State Public School.
Home for Feeble-Minded.
State Reformatory.

Offices of the board are in the capitol building, where the accounts and records are in charge of the secretary, who has an office force of four (4) clerks and a janitor.

Purchases are made and business done either by the Board or by the officers of the several institutions under instruction of the Board.

The accounts from all institutions are passed upon monthly by the Board, and bills therefor, if allowed, are filed, certified to the Secretary of State as Auditor, who issues warrants upon the Treasurer for those audited.

The details of the unified accounting system, adopted by chapter 433 of the laws of 1901, provides that all original bills after having been allowed by the Board of Control, shall be filed with the Secretary of State as Auditor, and that no warrant shall be issued and no money shall be paid out except upon itemized vouchers which have been filed with him, showing for what purpose the debt has been contracted.

STATE BOARD OF CONTROL OF REFORMATORY, CHARITABLE
AND PENAL INSTITUTIONS.*Organization and power of board.*

It consists of five members who shall devote their entire time and attention to their duties prescribed by law.

The board is a body corporate with such powers as may be necessary for full performance of expressly conferred powers.

Wis. Stats., sec. 561, p. 406.

Appointment; oath; terms; vacancies.

Members are appointed by the Governor, and at the time of appointment no two shall reside in same Congressional district.

They shall not all, at such time, be of same political party.

Terms five years and vacancies to be filled for unexpired term.

Each member shall take the constitutional oath, which shall be filed with Secretary of State.

Wis. Stats., sec. 561a, pp. 406, 407.

Meetings.

The members shall have an office in the capitol and shall hold a regular meeting once each month.

Wis. Stats., sec. 561b, p. 407.

Supplies—Books.

Necessary furniture, blanks and printing shall be supplied to the board, and it may purchase 200 copies of proceedings of the National Conference of Charities and books, etc., for its library not to exceed \$100 per annum.

Salaries and assistants.

Salary of members shall be \$2,000 yearly and expenses necessarily incurred for the state, which shall be audited by the Secretary of State.

Wis. Stats., sec. 561c, p. 407.

This act provides the conditions under which Secretary of State as Auditor may approve vouchers for transportation.

Ch. 426, L. 1901.

The board may employ:

A secretary at \$2,000 annually.

A clerk at \$1,200 annually.

A clerk at \$900 annually.

A clerk at \$720 annually.

A stenographer at \$720 annually.

Wis. Stats., sec. 170, p. 262, as amended by ch. 249, L. 1899, as amended by Google

Report.

The board shall make a report to the Governor on or before December 1, each even-numbered year covering the preceding two years for details (see page 407) of what the report shall contain (last page).

Wis. Stats., sec. 561d, p. 407.

This act provides for an additional report to be made to the Governor before January 10, each odd-numbered year.

Ch. 97, L. 1901.

Charges for support of inmates of institutions.

Each October 30th the board shall file with the Secretary of State a statement as herein provided, giving names of inmates in the hospitals, in Industrial School for Boys and in Home for Feeble Minded during last fiscal year for any part of whose support any county is legally chargeable. The amount of charges for such support shall be collected with the state tax.

For further details of procedure see page 408.

Wis. Stats., sec. 561c, p. 408.

Investigations; communications to board.

The board has full power to make investigation of complaints against institutions, as herein provided.

Letters from inmates of institutions to board members shall not be opened or read by institution officers or employee.

Wis. Stats., sec. 561g, p. 409.

Spur railroad tracks.

Board may construct and operate spur railroad track or license any railway company to do so, to connect any institution with a general railway line under provision of this section.

Wis. Stats., sec. 561h, p. 409.

Manufacturing in state prison; debt against state.

Board may establish a manufacturing business in state prison and may incur a debt against the state, as herein provided.

Wis. Stats., sec. 561i, p. 409.

Duties of board as to state institutions.

The duty of the board shall be (as relates to following institutions):

1. To maintain and govern:

Wisconsin State Hospital for Insane.

Northern Hospital for Insane.

The State Prison.

Wisconsin State Reformatory.

Industrial School for Boys.

School for the Blind.

School for the Deaf.

State Public School.

Home for Feeble Minded.

And all other reformatory, charitable and penal institutions that may be maintained by the state.

2. To direct the management and promote the interests of said institutions.
3. To hold in trust for institutions property or money conveyed or bequeathed thereto as herein stated.
4. To care for the institutions' property.
5. To make October 1, each year, an inventory as herein required.
6. To make and cause printed by-laws, rules and regulations, as herein required.
7. To visit and inspect institutions at least once each month for purposes herein named.
8. To fix the number of officers, teachers, and employees in each institution and prescribe duties and compensation where same is not fixed by law.

Wis. Stats., sec. 561j, p. 409.

Postage and stationery.

The Board of Control shall be furnished with postage and stamped envelopes for the official correspondence; also stationery, as herein provided.

Wis. Stats., sec. 169, p. 258; sec. 390, p. 301.

Transfer of inmates of institutions.

Any inmate committed to any institution by the board may be transferred in a proper case from one of the institutions to any other by the board.

The board, acting as a commission in lunacy, may also adjudge any prisoner in the state, in any county jail or in the Milwaukee house of correction to be insane and may, with the approval of the Governor, remove him to one of the state hospitals for the insane.

Sec. 561jj, p. 411; see also sec. 561f, p. 408.

Secretary's duties.

The Secretary of the board shall keep its books, records and accounts as it may prescribe.

Wis. Stats., sec. 561k, p. 411.

Salaries of institutions and bonds.

The board shall determine the salaries of the officers of institutions if not otherwise fixed, and shall require any other officer or person having the possession or custody of any money or property belonging to the state or institution under its control to give bonds and from time to time renew the same.

Wis. Stats., sec. 561L, p. 412.

Bills for purchases.

All bills of property purchased shall be laid before the board at its next regular meeting, which they must allow before payment.

Wis. Stats., secs. 561m-561o, p. 412.

Estimates and accounts.

The board once each month, with the aid of institution officers, shall prepare an estimate of the expenditures for each institution.

It shall also fix a regular time for passing upon all accounts and charges against the institutions.

Wis. Stats., sec. 561n, p. 412.

Funds for inmates.

The steward shall, as herein provided, make a report to the board of all money or property paid or delivered to any officer or employee of either institution for the benefit of any inmate thereof.

Wis. Stats., sec. 561p, p. 413.

Reports from institutions.

Each institution shall make a monthly report to the Board of Control.

What reports shall contain.

Wis. Stats., sec. 562, p. 413.

Duties of board as to other than state institutions.

Duties of board in reference to protection of institutions against fire and other contingencies.

Reference to inspection of jails and county asylums.

Wis. Stats., sec. 564, p. 414, amended by ch. 226, L. 1899.

Veterans' Home.

The Wisconsin Veterans' Home shall be visited by at least two board members, who shall carefully examine into the management of said home as to its system of accounts and keeping books, etc.

Wis. Stats., sec. 567, p. 416.

School for Blind—Accounts.

The accounts of the steward of the School for Blind for moneys advanced for the education of any pupil shall be approved by the board.

Wis. Stats., sec. 568, p. 417; sec. 569, p. 417.

Authority over state public school.

Wis. Stats., sec. 573a, p. 418, amended by ch. 223, L. 1901.

School record.

The board shall provide and keep in the state public school at Sparta a record in which shall be entered the names and ages of all children received. A brief history of each child shall also be kept and continued during the guardianship of the board.

(Ch. 109, L. 1901, provides for the admission of certain deformed or crippled children.)

Wis. Stats., sec. 573h, p. 421.

Agent of schools; duties.

The board may appoint one or more persons to act as agent or agents thereof, with duties to be prescribed by board.

Duties of agent.

Wis. Stats., sec. 573h, p. 421.

Superintendent's report.

The board shall receive, at the close of each biennial term, a report from the superintendent of such school.

What report shall contain.

Wis. Stats., sec. 573i, p. 421.

Adoption of children.

The board may consent to the adoption of any child who is an inmate of the state public school in the manner provided by law; and such consent given in writing shall have the same force and effect as if given by the parent.

On the consummation of such proceedings the guardianship of the board over the child ceases.

Wis. Stats., sec. 573j, p. 422.

Home for Feeble Minded.

Wis. Stats., sec. 573k, p. 422.

Charges for support.

The board shall adopt and publish a schedule of maximum charges for the care of persons in the Home for Feeble Minded.

Wis. Stats., sec. 573l, p. 422.

Discharge and transfer of patients.

Wis. Stats., sec. 573r, p. 422.

Collection of charges.

The superintendent shall certify to the State Board of Control the several amounts credited to the Home for Feeble Minded.

Wis. Stats., sec. 573m, p. 423.

This act provides counties with remedies to recover sums in certain cases out of the estates of inmates.

Ch. 63, L. 1901.

School for Deaf.

Wis. Stats., sec. 574, p. 424.

Object and government of school.

The accounts for moneys advanced to steward for the School for the Deaf shall be approved by the Board of Control.

Wis. Stats., sec. 575, p. 424.

State aid to schools.

The State Superintendent, with the consent of the board, may grant permission to any city, village, upon application, to establish and maintain one or more schools for the instruction of the deaf mutes who are residents of this state.

Wis. Stats., sec. 578, p. 425.

The State Hospitals for Insane.

Wis. Stats., sec. 580, p. 426.

Hospital districts.

The board and Governor shall constitute a special board who shall divide the state by counties into two districts for hospitals for the insane.

Wis. Stats., sec. 581, p. 427.

Correction of mistake as to charge for patients' support.

A. written application may be made to the board for relief from improper charges for any inmate in either the State or county hospital through the Attorney General, in behalf of the state, and the district attorney, in behalf of the county. If the board is satisfied that the relief asked for should be granted, it shall grant it by a written order.

Wis. Stats., sec. 591, p. 435.

Removal of non-resident.

When it is found that any inmate of either hospital is a non-resident and that neither the state or county is properly chargeable for his support, the board shall ascertain the residence of such inmate and communicate with the proper officers with respect to his return thereto, and if practicable cause him to be removed from such hospital and delivered to the proper officer, if the same can be done at a cost not exceeding \$100.

Wis. Stats., sec. 594, p. 436.

Compensation by state.

Whenever any asylum is completed according to the plans and specifications approved by the board, a certificate of that fact, signed by the president and secretary thereof, to be filed with the Secretary of State.

Wis. Stats., sec. 604d, p. 440.

Accounts, rendition and approval of care of non-residents—Compensation for care of inmates.

The certificate of the trustees of any county asylum shall be verified by the affidavits and delivered by the Secretary of State to the board. If the board approves approval to be indorsed thereon.

The board may, whenever in its opinion any county has not made provision for the proper care of its acute or chronic insane, direct the removal of either class thereof to the asylum of some other county.

For compensation for care of inmates see statutes noted in the margin.

Wis. Stats., sec. 604c, p. 440; sec. 604f, p. 441; sec. 604m, p. 443.

Transfer of insane.

All orders made by board for the transfer of insane under this chapter shall be sent to the judge of the county to which the support is chargeable.

Wis. Stats., sec. 604n, p. 443.

Collection of cost of support from estate.

The board may apply to the proper county judge to compel any person having charge of property and estate of any inmate of either hospital to pay therefrom for the support of such inmate.

Wis. Stats., sec. 604q, p. 444.

Support of insane accused persons.

The board may with the approval of the Governor contract with the trustees of the Milwaukee insane hospital for the care and maintenance of insane convicts or of any person who may be acquitted of any criminal charge on ground of insanity.

The price must not exceed \$4.25 per week for each person.

Wis. Stats., sec. 604r, p. 444.

Corporations for care of insane, etc.

The board may visit institutions covered by this section whenever they will and shall examine into the condition, care and treatment of its inmates and report concerning the same to the Governor.

Wis. Stats., sec. 1786a, p. 1307.

Reports.

Any corporation organized under this chapter shall report to the board such facts as may be required.

Provision made for children placed in improper homes.

Wis. Stats., sec. 1786d, p. 1309.

Government of.

The board shall govern the state prison and shall exercise those powers conferred by chapter 29, in addition to the powers herein prescribed.

Wis. Stats., sec. 4887, p. 2876.

Warden and steward.

The board shall appoint a warden and steward for a term of one year unless sooner removed by said board.

Wis. Stats., sec. 4888, p. 2876.

Other officers, etc.

All other officers and assistants in the prison shall be appointed by the state board upon the nomination of the warden and shall be subject to removal at the pleasure of the board.

Wis. Stats., sec. 4889, p. 2876.

Compensation.

The board may fix the amounts received by the officers and employees with the exception of the warden, deputy warden and chaplain as herein provided.

Wis. Stats., sec. 4890, p. 2876, amended by ch. 277, L. 1901.

Visits by and powers of board.

The board visit the prison at least once a month and it shall have the power to direct any alteration in the business.

Wis. Stats., sec. 4891, p. 2876.

Books to be open.

All books and documents relating to the concerns of the prison shall be open at all times to the examination of the board who shall once in each quarter examine said books and compare them with the vouchers and documents relating thereto.

Wis. Stats., sec. 4892, p. 2877.

Report.

What the biennial report of the board shall contain in addition to the matters specified in section 561d.

Wis. Stats., sec. 4894, p. 2877.

Warden's duties.

The board shall direct the warden in regard to the charge and custody of the prison. It shall on the first day of each month receive a full statement of all moneys received and expended by the warden, showing on what account received and expended and such report shall be accompanied with proper vouchers for the expenditures therein reported.

Wis. Stats., sec. 4895, p. 2877.

Oath and bond.

The board shall approve of the bond of the warden.

Wis. Stats., sec. 4896, p. 2877.

New bond.

The board may require the warden to file new bonds with satisfactory security subject to the approval of the board.

Wis. Stats., sec. 4897, p. 2877.

Prison clerk's duties.

The board may require other duties of the prison clerk in addition to those herein specified.

Wis. Stats., sec. 4902, p. 2878.

Bonds of deputy and clerk.

The board shall approve of the bonds of the deputy warden and prison clerk.

Wis. Stats., sec. 4903, p. 2878.

Steward's bond and duties.

The board shall approve of the sureties of the steward.

Wis. Stats., sec. 4907, p. 2879.

Contract labor; arbitration.

Whenever any controversy shall arise respecting any contract made on account of the prison or a suit shall be pending thereon, the board may submit the same to the final determination of arbitrators or referees to be appointed by the Governor.

Wis. Stats., sec. 4908, p. 2879.

Books, purchase of.

The board may direct the purchase of books and stationery for the prison by the warden.

Wis. Stats., sec. 4936, p. 2883.

Authority of state board.

The board is authorized and empowered to lease the labor of such portion of the prisoners confined in the prison, together with such shop-room, machinery and power as may be necessary for their proper employment.

Wis. Stats., sec. 4938, p. 2884.

Contracts for convicts' labor.

The board shall, before entering into any contract for the leasing of convict labor by public advertisement for at least four weeks in one newspaper published in each of the cities of Milwaukee and Chicago and in the official state paper, invite sealed proposals for the hiring of such labor and the shop-room, machinery and power which can be furnished.

Wis. Stats., sec. 4943, p. 2885.

The board shall use its utmost powers to have all the terms and conditions of the contracts fully complied with on its part.

Wis. Stats., sec. 4940, p. 2884.

Cancellation of contract.

The Board may make all needful rules and regulations for the guidance of the warden in the execution of any contract made by it and may determine and cancel any contract as herein provided.

Wis. Stats., sec. 4941, p. 2884.

Money for deserving convicts.

Whenever any convict, by good behavior, diligence in labor or study or otherwise shall surpass the general average of convicts, the board may compensate him therefor and may adopt rules for the payment to deserving convicts on their discharge or while in prison.

Wis. Stats., sec. 4942, p. 2884.

Industrial school; discharge and return of inmates.

The board is authorized to discharge any child or children from the industrial school who shall have been legally committed thereto, subject to the power of the Governor to grant pardons.

Wis. Stats., sec. 4962, p. 2894.

Authority of state board.

The board may make such rules, regulations, ordinances and by-laws for the government discipline and management of the school (Industrial) and the inmates thereof as to it seems just and proper.

Wis. Stats., sec. 4964, p. 2894.

Officers and teachers.

The board shall appoint officers and teachers as it may deem necessary.

Wis. Stats., sec. 4965, p. 2894.

Printing.

The report of the board shall be limited to 350 pages and 2,000 copies shall be printed.

Wis. Stats., sec. 335a, p. 314.

Debts.

It shall be unlawful for the board or any member or committee thereof to contract or assume to contract either directly or indirectly, any debt or liability against the state or either of such institutions for any purpose whatever without authority of law therefor.

Wis. Stats., sec. 563, p. 414.

Facilities for investigation—oaths and expenses.

Wis. Stats., sec. 565, p. 415.

For current expenses of the institutions under the control of the board there is appropriated under this act to the Wisconsin State Hospital, to Jan. 1, 1903, \$130,000.00; Northern Hospital, to January 1, 1903, \$127,000.00; School for the Deaf, to March 1, 1903, \$74,000.00; School for the Blind, to March 1, 1903, \$65,000.00; Industrial School for Boys, to January 1, 1903, \$100,000.00; State Prison, to March 1, 1903, \$87,000.00; Public School, to March 1, 1903, 80,000.00; Home for Feeble-minded, March 1, 1903, \$88,000.00; State Reformatory, to April 1, 1903, \$80,000.00.

Ch. 186, L. 1901.

Appropriates for repairs and improvements as follows: Northern Hospital, \$15,000.00; State Prison, \$12,500.00; State Public School, \$2,000; Home for Feeble Minded, \$50,000.00.

For details the act should be consulted.

Ch. 382, L. 1901.

This act authorizes the Board of Control with the approval of the Governor to purchase land for the reformatory at a price not to exceed \$1.50 per acre.

Ch. 269, L. 1901.

This act authorized the board to settle the boundary line of grounds at Home for Feeble Minded in Chippewa county.

Ch. 222, L. 1901.

DISBURSEMENTS FOR MAINTAINING INSANE IN COUNTY ASYLUMS

For the year ending Sept. 30, 1900..... 375,860 62

Pages 165 and 171 in the report of the Secretary of State for the year ending Sept. 30, 1900.

DISBURSEMENTS OF THE BOARD OF CONTROL

For the year ending Sept. 30, 1900.

Salaries and expenses of five (5) members	\$14,319 92
Salaries of five (5) employes	5,540 00
Per diem and expense of auxillary member	2,615 04
Printing and advertising, including cost of paper and waste, per report Commissioners Printing.	564 63
Postage and P. O. box rent	577 00
Expressage	72 86
Telephone and telegrams	267 82
Books	75 60
National conference of charities report	112 50
Subscription	7 80
Stationery, per report Superintendent Public Property	131 60
Total	\$24,084 77

Pages 163, 164, 488 and 500 in the report of the Secretary of State for the year ending Sept. 30, 1900.

DISBURSEMENTS FOR INSTITUTIONS

For the year ending Sept. 30, 1900.

Wages and salaries	\$232,277 43
Current expenditures	420,135 98
Expenditures other than above	42,101 65
Printing, including cost of paper and waste, per report Commissioners Printing	214 86
Appropriation under ch. 302, L. 1899	16 40
Total	\$694,746 32

Pages 164 and 488 of the report of the Secretary of State for the year ending Sept. 30, 1900.

WISCONSIN INDUSTRIAL SCHOOL FOR GIRLS.

To this institution the legislature makes appropriations, but no state control in the strict sense is sought to be exercised. Chapter 33 of the laws of 1899 appropriated \$16,000 under restrictive conditions, and provided that a correct account be kept of expenditures and reports to the Governor and legislature in the next annual and biennial reports.

Chapter 180 of the laws of 1901 appropriates to this school \$6,000 for repairs and building and for the care of the property belonging to the state, and \$3,000 for the erection and furnishings of additional building upon land belonging to the state, provided that no plans shall be adopted or contracts entered into until the plans have been approved by the Governor as herein provided.

The managers of the school are required to report to the legislature biennially and annually.

DISBURSEMENTS FOR WISCONSIN INDUSTRIAL SCHOOL FOR GIRLS

For the year ending Sept. 30, 1900.

Appropriation by the state\$13,000 00

Page 171 in the report of the Secretary of State for the year ending Sept. 30, 1900.

WISCONSIN VETERANS' HOME AT WAUPACA.

This institution was founded by the state for the support of honorably discharged veterans of the Civil War, who were ineligible for admission to the National Soldiers' Homes, also for the support of destitute women under conditions imposed by law. In addition to the support given by the state, the United States, by authority of acts of Congress approved August 27, 1888 and subsequent, pays each state to aid in the support of disabled volunteer soldiers in state Soldiers' Home, under conditions named in acts of Congress, not exceeding one-half ($\frac{1}{2}$) the cost of maintenance, but not over \$100 for each person, provided that one-half ($\frac{1}{2}$) of any sums retained by said Homes on account of pensions received from inmates shall be deducted from the aid provided.

The present practise is for the claims against the general government for this aid to be made up by officials of the "Home" and forwarded direct to Washington and for payments thereof to be made to the Governor of the state.

The amount received from the United States in 1899 on this account was \$26,322.92, and in 1900, \$17,033.24.

The amount paid by the state to the "Treasurer of the Veterans' Home" for care of inmates was \$70,652.72 in 1899, and \$73,989.40 in 1900.

The state also pays to the Treasurer of Veterans' Home \$5,000 annually (chapter 248, laws of 1893), in addition to special appropriations for specific purposes, which in 1899 was \$20,000 and in 1900, \$15,000.

The accounts of this Home have never been regularly passed upon by the State Auditor. The Home is not treated as a state institution in the general sense, but as one to whom the state grants aid to carry out the purposes for which it was founded.

(The act of Congress of August 27, 1888, provides that said

Homes shall be exclusively under the control of the state authorities.)

Based upon the report of the secretary of state for 1900, pages 153 and 171, the state paid over to the Veterans' Home \$93,989.40 in 1900 and received during the same period from the United States \$17,033.24 resulting from claims for "one-half ($\frac{1}{2}$) the cost of maintaining," etc., making the net expense of the institution to the people of the state for one (1) year \$76,956.16.

WISCONSIN VETERANS' HOME.

Support of inmates of Wis. Vet. Home.

This institution shall receive from the state \$3.00 per week for each inmate upon monthly bills as herein provided. This support limited to destitute soldiers, sailors, marines and such women as are herein provided.

Payments subject to provision of chapter 393, laws of 1891.

Wis. Stats., sec. 1529a, p. 1130, amended by ch. 304, L. 1899.

This act appropriated \$20,000 for improvements.

Ch. 383, L. 1901.

Examination by board of control.

Provides for a careful examination of this Home twice a year by the Board of Control and report to the Governor but no power is thereby given to said board to interfere in the management thereof.

Wis. Stats., sec. 567, p. 416.

DISBURSEMENTS ON ACCOUNT OF THE WISCONSIN VETERANS' HOME

For the year ending Sept. 30, 1900.

Care of inmates	\$73,989 40
Annual appropriation	5,000 00
Balance appropriation, ch 122, L. 1899	15,000 00
Total	\$93,989 40

Page 171 in the report of the Secretary of State for the year ending Sept. 30, 1900.

STATE BOARD OF HEALTH.

This board was established in 1876 to have general supervision of the interests of the life and health of the citizens of the state and consists of seven (7) members, one of whom is appointed annually, term seven (7) years.

The board elects its own officers, meets as required by law in January and June and at other times fixed by the President.

The annual appropriation is \$5,500. The state prints the biennial report of the Board and circulars of information. All other printing and the expenses of the Secretary of the Board are to be paid out of the amount of the annual appropriation.

STATE BOARD OF HEALTH.

Haw constituted, term, vacancies.

The State Board of Health and Vital Statistics shall consist of seven members. Their terms of office shall be seven years and until successors appointed, and they shall continue as at present arranged so that the term of office of one member shall expire each year.

The Governor shall fill all vacancies with the approval of the senate, if the legislature be in session, and if not, then subject to the approval of the senate at the next succeeding session.

Vacancy filled for residue of term only.

Wis. Stats., sec 1404, p. 1052.

Meetings, quorum.

The board shall meet in January and June in each year and at such other times and places as may be directed by the board or its president, except that the January meeting shall be held at Madison.

The board may adopt by-laws for its government not inconsistent with the law.

Wis. Stats., sec. 1405, p. 1052.

Officers; compensation.

The officers of the board shall be a president, a member of the board and a secretary, either from their own number or otherwise. The secretary shall receive an annual salary to be fixed by the board. No other compensation shall be paid any other member of the board except for special services for which provision is expressly made.

Wis. Stats., sec. 1406, p. 1052.

Duties of secretary.

The secretary shall be the executive officer of the board. He shall keep a record of its transactions and have the custody of its papers, books and other property. He shall, so far as practicable, communicate with other similar boards of health within the state and file and keep all reports of correspondence. He shall prepare and distribute to local boards blank forms and instructions as may be necessary and collect all such information and statistics as concern the work of the board and perform all other duties which may be prescribed by law or by the by-laws of the board.

He shall also be superintendent of vital statistics, and under the directions of the Secretary of State collect the statistics of marriages, births and deaths and prepare and publish the report thereof required by law.

Wis. Stats., sec. 1409, p. 1055.

General authority.

The board shall have a general supervision throughout the state of the interests of the health and life of citizens and shall especially study the vital statistics of the state and endeavor to put the same to intelligent and profitable use.

They shall make sanitary investigations and inquiries respecting the causes of diseases, especially epidemics.

They shall voluntarily or when required advise public officers or boards in regard to the location, drainage, water supply, disposal of excreta, heating or ventilation of any public building or institution and shall recommend works of hygiene for the use of public schools.

They shall send their secretary or committee to any part of the state whenever deemed necessary to investigate the cause and circumstances of any special or unusual disease or mortality or to inspect any public building. Such officers shall have full authority to do any necessary act therefor.

The board shall in October of each even-numbered year, report to the Governor their transactions, investigations and discoveries during the preceding year and such suggestions for legislature as they think fit.

Wis. Stats., sec. 1407, p. 1053.

This act provides for an additional report to be made to the Governor before January 10, each odd-numbered year.

Ch. 97, L. 1901.

Power as to contagious diseases.

Effect of rules.

Wis. Stats., sec. 1408, p. 1053.

Reports to board.

The state board shall receive at least once a year reports from the health physician and the clerk of the board of health in every town, village and city of their transactions and such facts as shall be required upon blanks and according to instructions furnished and shall also make special reports when required.

It shall also receive any information required touching the public health from all officers of the state, the physicians of all mining, manufacturing, and other companies or associations, all presidents, officers, and agents of any corporation transacting business under the laws of the state. Any person refusing to comply with the provisions of this section shall forfeit \$10.

Wis. Stats., sec. 1409a, p. 1055.

Report to State Board of Health.

It shall be the duty of every register of deeds to make such monthly or quarterly reports of births and deaths on blanks furnished by the State Board of Health, as the Secretary of the board may designate in said blanks, to enable the board to study the vital statistics of the state.

Wis. Stats., sec. 1026a, p. 790.

Physiology and hygiene.

To approve text-books, when.

Wis. Stats., sec. 447a, p. 364.

Printing.

Its report shall be limited to 200 pages and 9,000 copies shall be printed.

Wis. Stats., sec. 335a, p. 314.

Duty of the local health board; power of veterinarian.

Wis. Stats., sec. 1492a, p. 1101.

The health commissioner, his duties, rule to be approved, recommendations, salary, assistants.

Wis. Stats., secs. 925 to 925-111, p. 668.

The act provides \$50,000 for the prevention of Asiatic cholera.

Ch. 200, L. 1901.

Board may investigate sanitary condition of school-houses.

Ch. 225, L. 1901.

DISBURSEMENTS IN THE STATE BOARD OF HEALTH

For the year ending Sept. 30, 1900.

Secretary's expenses and salary of Board.....	\$5,933 77
Secretary's sanitary work at New Richmond (which was paid out of \$50,000 contingent fund, provided by ch. 24, L. 1901)	4,062 23
Total	\$10,016 05

Page 171 in the report of the Secretary of State for the year ending Sept. 30, 1900.

STATE VETERINARIAN.

This officer is appointed by the Governor and confirmed by the Senate. He may quarantine animals afflicted with contagious and infectious diseases, and the Statutes of Wisconsin of 1898, section 1492b, provide under what conditions animals may be killed.

His salary is \$2,000 per year and his actual and necessary expenses incurred in the performance of his duties.

STATE VETERINARIAN.

Appointment, term, duties.

The Governor shall with the advice and consent of the senate, appoint a competent veterinary surgeon to the office of State Veterinarian for a term of two years. The person so appointed shall take oath of office which shall be filed in the office of the Secretary of State.

It shall be his duty to prevent the introduction or spread of contagious diseases among domestic animals in this state.

Wis. Stats., sec. 1492, p. 1101.

Allowance to; bulletins.

He shall be allowed, with the consent and approval of the Governor, \$500 annually for experimental purposes. He shall, from time to time, issue such information as he may deem advisable, which, with his report to the Governor, to be made in October of each even-numbered year, shall be printed. He shall deliver lectures on veterinary science in the Agricultural department of the University.

Wis. Stats., sec. 1492e, p. 1103.

Power of killing and appraisement of animals. Notice of disease.

His power as to quarantine, as to killing animals and appraisal of animals, as to reporting to the Governor recommendations in regard to contagious or infectious animal diseases. (Sections 1492a, b, and c should be consulted.)

Wis. Stats., sec. 1492a, p. 1101; sec. 1492b, p. 1102; sec. 1492c, p. 1103.

Postage, stationery, compensation, expenses.

He is allowed postage and stamped envelopes for his official correspondence.

His compensation shall be \$2,000 per year and actual and necessary expenses incurred in performance of duties.

Wis. Stats., sec. 169, p. 258; sec. 121, p. 236; sec. 170, p. 261.

DISBURSEMENTS IN THE DEPARTMENT OF THE STATE VETERINARIAN

For the year ending Sept. 30, 1900.

Salary of State Veterinarian	\$2,000 00
Expenses of State Veterinarian	2,144 71
Supplies	113 28
Consultation with other veterinary surgeons, twelve.....	198 88
Services of other individuals	249 76
Disbursements on account of diseased animals slaughtered	3,631 25
Stationery, per report Superintendent Public Property.....	10 20
Total	<u>\$8,548 08</u>

Pages 171, 172, 173 and 500 in the report of the Secretary of State for the year ending Sept. 30, 1900.

COMMISSIONERS OF FISHERIES.

This is a Board composed of the Governor and six (6) commissioners appointed by him and confirmed by the Senate, and the professor of zoology in the University. The terms of office of the appointed commissioners is six (6) years.

The commissioners have charge of all matters pertaining to the propagation and breeding of fish.

No compensation is received by the commissioners but they are reimbursed their actual and necessary expenses incurred while on duty.

They are required to report to the legislature each odd-numbered year.

Under the provisions of chapter 423 of the laws of 1901 the money appropriated by the legislature will be paid out only on itemized vouchers filed with the auditor showing for what purpose the debt has been contracted. The practice heretofore has been for the commissioners to draw the money in round sums and disburse the same free from the control of the state auditor.

COMMISSIONERS OF FISHERIES.

Appointment, terms.

The Commissioners of Fisheries shall consist of eight members as follows: The Governor, six commissioners to be appointed by him and confirmed by the senate, and the professor of zoology of the university. The terms are six years and until their successors appointed. If the senate is not in session the commissioners shall act from the date of appointment. As vacancies occur the Governor shall appoint one commissioner for one year, one for two, one for three, one for four, one for five and one for six years and when vacancies have been filled the appointments shall be for six years. Vacancies by appointment filled residue of term only.

Wis. Stats., sec. 1495, p. 1108.

Officers, committees, supplies and fund.

One member shall be president, one treasurer and one secretary.

They constitute an executive committee, and may act in all matters pertaining to the propagation of fish in the absence of the board under regulations prescribed in the by-laws. They may choose from their number other officers as by-laws provide. They may meet at times and places as by-laws prescribe and appoint such committees for such duties as they deem wise.

They shall receive no compensation, but each shall be paid his actual expenses, certified by him by items to be actually and necessarily incurred in the performance of duties, out of legislative appropriation. They shall have a suitable office in the capitol, furniture therefor and such stationery, postage and printing as may be necessary and may use not to exceed \$26,000 per annum in the discharge of the duties devolved upon them.

Wis. Stats., sec. 1496, p. 1108.

Powers and duties.

They have charge of the following matters and necessary powers therefor.

1. The propagation and breeding of fish.
2. The collection and diffusion of useful information in regard to same.
3. The control, supply and repair of the state hatcheries and grounds, buildings, ponds, apparatus and all other property belonging to or held by the state for the propagation of fish.
4. The purchase and establishment and control in like manner of new hatcheries when appropriations shall be made by law.
5. The receiving from the U. S. and from other states or other persons all spawn, fry and fish donated to the state or purchased and procure, receive, distribute and dispose of spawn and fish. To make contracts and carry out the same for the transportation of fish cars, cans, commissioners and employees and to take measures as shall in their judgment best promote the supply of food fishes in the state.
6. The propagation of Chinese pheasants and such other fowl and other game as they may deem advisable.
7. They shall report in January of each odd-numbered year to the Legislature.

Wis. Stats., sec. 1497, p. 1109, amended by ch. 203, L. 1899, sec. 1.

This act provides for an additional report to be made to the Governor each odd-numbered year.

Ch. 97, L. 1901.

Commissioners may appoint a superintendent of fisheries at \$2,000 annually and an assistant superintendent at such salary as they may fix.

Duties of such officers.

Wis. Stats., sec. 1497a, p. 1109.

Power to take fish from public waters as herein provided.

Wis. Stats., sec. 1497b, p. 1110; ch. 311, L. 1899, amended by ch. 407, L. 1901.

Provisions empowering the superintendent to take fish from any person or corporation to be stripped of eggs and milt, as herein provided.

Wis. Stats., sec. 1497c, p. 1110; ch. 311, L. 1899.

Postage, Stationery.

Authorizes postage and stationery for the commissioners.

Wis. Stats., sec. 169, p. 258; sec. 290, p. 301.

Printing; report.

The report of the Commissioners of Fisheries shall be limited to 25 pages and 1,050 copies shall be printed.

Wis. Stats., sec. 325b, p. 314.

This act authorizes the commissioners to release a public easement in certain lands.

Ch. 189, L. 1901.

DISBURSEMENTS ON ACCOUNT OF THE COMMISSIONERS OF
FISHERIES

For the year ending Sept. 30, 1900.

Appropriation paid to their treasurer (including \$5,000 available from previous appropriation)	\$31,000 00
Printing, including cost of paper and waste, per report Commissioners Printing	23 20
Postage	137 00
Stationery, per report Superintendent Public Property	20 49
Total	\$31,180 69

Pages 173, 438 and 500 in the report of the Secretary of State for the year ending Sept. 30, 1900.

FISH AND GAME WARDEN AND DEPUTY WARDENS.

The State Warden is appointed by the Governor for a term of two years with a salary of \$1,800 per year and his actual and necessary expenses and disbursements incurred in performance of duty.

Chapter 312 of the laws of 1899, amending section 1498a of the statutes of 1898, provides for the appointment, with the approval of the Governor, of thirty special deputies to assist in the enforcement of the fish and game laws.

The compensation of such deputies, which shall be fixed by the State Warden with approval of the Governor, shall be paid from a fund created by the license money received by the state as provided by chapter 312 of the laws of 1899.

FISH AND GAME WARDEN AND DEPUTY WARDENS.

Appointment, duties and salary.

The Governor shall appoint a fish and game warden for a term of two years from the date of his appointment. Any vacancy shall be filled by the Governor for the residue of the term.

He shall enforce the laws for preservation of fish and game and bring actions and proceedings to recover fines and penalties provided for. He shall receive \$1,800 per year and actual disbursements while traveling in the line of duty. Such expenses shall be approved by the Governor. He shall be furnished with the necessary printing, stationery and postage and shall be furnished a suitable room in the capitol.

Wis. Stats., sec. 1498, p. 110, amended by ch. 408, L. 1901.

This act provides for the conditions under which the Secretary of State as auditor may approve the vouchers for transportation.

Ch. 428, L. 1901.

Deputy wardens.

The warden may appoint with Governor's approval 30 special deputies who shall have like authority with the warden in the enforcement of the laws. At least two and not more than four of said special wardens shall be appointed from each congressional district. Such special wardens may be removed by the state warden at any time and their places filled in like manner as at the original appointment.

Wis. Stats., sec. 1498a, p. 1110, amended by ch. 312, L. 1899, amended by ch. 358, L. 1901.

County deputies.

When any county Board shall authorize the appointment of county wardens and shall fix the number of same the county judge, district attorney and county clerk, acting as a board of appointment, shall select person therefor and certify their names to the state warden, who shall, if he approves, issue commissions as deputy wardens to such persons. The compensation of said county wardens shall be fixed by the board and be paid out of the county treasury.

Wis. Stats., sec. 1498b, p. 1111, amended by ch. 312, L. 1899, amended by ch. 408, L. 1901.

Deputies to make complete statements to the state warden.

Ch. 312, sec. 3, p. 563, L. 1899.

For general powers and duties of the warden and his deputies see statutes referred to in margin.

Wis. Stats., secs. 1498c-1498k, pp. 1111-13.

Per diem and expenses of deputies.

The 30 deputies shall each receive a per diem to be fixed by the warden with the approval of the Governor. Said per diem shall be for such days as each deputy shall be under the direct order of the warden to perform services in the enforcement of the fish and game laws and upon the certificate that such services have been actually rendered under his direction.

They shall also receive their actual and necessary expenses incurred while working under the direction of the state warden, which shall be paid upon the vouchers approved by the Governor and countersigned by the state warden.

Ch. 312, sec. 4, L. 1899, amended by ch. 358, L. 1901.

Disposition of fines.

For disposition of fines collected by counties the laws referred to in margin should be consulted.

Wis. Stats., sec. 1498h, p. 1112, amended by ch. 312, L. 1899.

Reports.

On 31st of December each year the state warden shall report to the Governor concerning the enforcement of the fish and game laws.

Wis. Stats., sec. 1498L, p. 1113, amended by ch. 312, L. 1899.

Provision is made for an additional report.

Ch. 97, L. 1901.

Preparation and issuance of.

Relates to the preparation and issuance of licenses to hunt to non-residents.

Wis. Stats., secs. 1498p-1498q, p. 1115, amended by ch. 512, L. 1893, sec. 10, amended by ch. 358, L. 1901.

Non-residents of state; fee.

For a license to hunt deer in the season therefor as fixed by law, which said license shall include permission to hunt any and all other kinds of game protected by law, in the several seasons fixed therefor, \$25; for the hunting of all kinds of game protected by the laws of the state, in the seasons or times fixed therefor by law, with the exception of deer, \$10. The application for either of these licenses shall state the residence of the applicant and answer such other questions or give such other information as may be required by the Secretary of State and the state fish and game warden, and be verified by the affidavit of the applicant that the residence stated and the answer made or information given are true.

Wis. Stats., sec. 1498r, p. 1116, amended by ch. 312, L. 1899, sec. 12.

License for residents of state.

Provides for county license for residents.

Wis. Stats., sec. 1498s., p. 1116, amended by ch. 312, L. 1899, sec. 13.

Access to records.

The state warden or either of his deputies may, at any time, examine the records of licenses issued by county clerks.

Wis. Stats., sec. 1498t, p. 1117, amended by ch. 312, L. 1899, sec. 15.

Liability of state in compensation of wardens.

All license money received shall be set aside by the Treasurer and constitute a fund for the payment of special deputies. The liability of the state for per diem salaries and expenses of deputy game wardens appointed under this act or otherwise and for all services and expenses incurred, for any purpose under or in consequence of this act, shall be limited to the fees paid in pursuance of this act.

And said game warden shall not issue any voucher nor shall the Governor approve any voucher, if issued by the said warden, under the provisions of this act or otherwise for any such per diem, salary or other expenses of any kind unless the money to pay such voucher received for licenses issued under this act shall at the time be on hand to pay the same.

Ch. 312, sec. 29, p. 577, L. 1899.

The state fish and game warden, all special deputies and all county wardens are appointed and created fire wardens under the provisions of this act.

Ch. 408, L. 1901.

DISBURSEMENTS ON ACCOUNT OF THE FISH AND GAME WARDEN

For the year ending Sept. 30, 1900.

Salary and expenses of warden	\$2,691 86
Printing, including cost of paper and waste, per report Commission- ers Printing	142 46
Postage and expressage	152 22
Telephone and telegrams	54 63
Stationery, per report Superintendent Public Property	11 24
Total	<u>\$3,052 41</u>

Pages 173, 488 and 500 in the report of the Secretary of State for the year ending Sept. 30, 1900.

SPECIAL DISBURSEMENTS TO DEPUTY WARDENS.

Per diem and expenses for year ending Sept. 30, 1900 (paid out of fund created by license fees received)\$37,762 56

TREASURY AGENT.

This officer's duty is to superintend and enforce the collection of license fees provided by the state law.

His compensation is twenty-five (25) per cent. of the amount which he may cause to be collected. He is provided with an office in the capitol, with necessary blanks, advertising matter, postage and stationery.

For powers of the special agents serving under him consult section 1580 of the Wisconsin Statutes of 1898.

TREASURY AGENT.

Appointment; oath; bond.

He shall be appointed by, and hold his office during the pleasure of, the Governor. He shall take oath and give \$5,000 bond with sureties approved by Governor, conditioned upon faithful discharge of his own duty and those employed by him, and that all moneys collected by him or his assistants shall be paid into the state treasury.

Wis. Stats., sec. 1578, p. 1158.

Fees of agent.

There shall be audited and paid out of the treasury the sum of 25 per cent. of the amount which the treasury agent may cause to be collected and paid into the state treasury as fees for licenses, which sums shall be compensation in full for his services and the services of his assistants and of all special treasury agents appointed by him or his assistant. Necessary blanks and advertising for the performance of his duties shall be furnished by the state.

Wis. Stats., sec. 1582, p. 1159.

Postage; stationery; Blue Book.

He shall be furnished with necessary postage and stationery for his office and shall have one copy of the Blue Book.

Wis. Stats., sec. 121, p. 236; sec. 169, p. 258; sec. 290, p. 301.

His duties; report to the Governor.

He shall superintend and enforce collection of license fees.

General outline of duties.

Report to the Governor.—What report shall contain.

Wis. Stats., sec. 1579, p. 1158.

Provision for an additional report to Governor.

Ch. 97, L. 1901.

Special agents.

For powers of special agents this section should be consulted.

Wis. Stats., sec. 1580, p. 1159.

Oaths and bonds.

Bonds and oaths deliverable to the treasury agent.

Wis. Stats., sec. 1581, p. 1159.

Duty of Attorney General.

Attorney General to advise him as herein required.

Wis. Stats., sec. 163, p. 255.

Of peddlers.

Licensing peddlers and provides for payments into state treasury of fees.

Wis. Stats., secs. 1570–1576, pp. 1155–1157, secs. 1584e, 1584f, pp. 1160–1.

DISBURSEMENTS IN THE DEPARTMENT OF THE STATE TREASURY AGENT.

For the year ending Sept. 30, 1900.

Treasury agent, 25 per cent. of receipts.....	\$2,725 09
Printing, including cost of paper and waste, per report Commissioners Printing	84 34
Postage and P. O. box rent	90 00
Telephone and telegrams	24 77
Stationery, per report Superintendent Public Property	16 45
Total	<u>\$2,940 65</u>

Pages 173, 488 and 500 in the report of the Secretary of State for the year ending Sept. 30, 1900.

STATE BOARD OF ARBITRATION.

Appointment; vacancies; oath.

The State Board of Arbitration and Conciliation as heretofore established is continued. Two members shall be appointed by the Governor, one to be an employer of labor or to be selected from some association representing employers of labor, and the other shall not be an employer of labor but shall be selected from some labor organization. The third member of the Board shall be appointed by the Governor upon the recommendations of those previously appointed; provided that such recommendation is not made within 30 days after their appointment he may appoint any person. They shall be elected for a term of two years unless they are sooner removed by the Governor and vacancies shall be filled for the unexpired term. Each member shall take the oath of office before entering upon their duties and such oath shall be filed in the executive office.

The Board shall organize by choosing one member as chairman and another as secretary, and shall adopt rules of procedure and submit them to the Governor and Attorney General, which rules shall be in force on approval thereof by them. All requests and communications intended for said Board may be addressed to the Governor at Madison, who shall at once refer the same to the Board for their action.

Wis. Stats., sec. 1729b, p. 1248.

Members' expenses and compensation.

The members of said Board shall be reimbursed the actual and necessary expenses incurred in the performance of their duties and be paid \$5 per day for every day actually and necessarily spent, which accounts, properly verified, shall be audited by the Secretary of State.

Wis. Stats., sec. 1729b, p. 1250.

Witnesses' fees.

Witnesses subpoenaed by the State Board shall be allowed for their attendance and travel the same fees as are paid witnesses in the circuit courts. Each witness shall certify under oath in writing the amount of his travel and the length of time of his attendance, and upon the approval of such statement by the Board and the presentation thereof to the Secretary of State a warrant therefor shall be drawn in his favor.

Wis. Stats., sec. 1729g, p. 1250.

Report.

The Board shall make a biennial report to the Governor, which report shall contain a succinct statement of the decisions made by them during the two preceding years and such recommendations as they deem proper. Two thousand copies of such report shall be printed in the style other official reports are printed and shall be distributed in the same way.

Wis. Stats., sec. 17291, p. 1250.

This act provides for an additional report to be made to the Governor before Jan. 10, each odd-numbered year.

As to procedure, arbitration, witnesses, books, notice, effect of decision, see secs. 1729 d and e, page 1249, Wis. Stats.

Ch. 97, L. 1901.

DISBURSEMENTS ON ACCOUNT OF THE STATE BOARD OF
ARBITRATION

For the year ending Sept. 30, 1900.

Services of three members and expenses of three members..... \$826 73

Page 173 in the report of the Secretary of State for the year ending Sept. 30, 1900.

SUPREME. COURT.

How constituted.

The chief justice and associate justices of the supreme court shall be known as justices of said court. The court shall consist of five justices.

Const., art. 7, sec. 1, p. 104.

Elections and vacancies.

When a vacancy shall occur it shall be filled by the Governor to continue until a successor is elected and qualified; such successor shall hold office for the residue of the unexpired term.

Const., art. 7, sec. 9, p. 107.

Terms of justices.

The term of office of each justice, when elected for a full term, shall commence on the first Monday of January next succeeding election, and when elected to fill a vacancy they shall hold office for the residue of term only, and shall take their oath of office on the first day of the next regular term of court after election.

Wis. Stats., sec. 2397, p. 1726.

Justice's oath.

Every justice shall before entering upon his duties take the constitutional oath and file the same with the Secretary of State.

Wis. Stats., sec. 2398, p. 1727.

Clerk of supreme court.

The justices shall appoint a clerk who shall hold his office at their pleasure. Such clerk shall take and subscribe the constitutional oath and file same with the Secretary of State.

Wis. Stats., sec. 2399, p. 1727.

Fees and per diem of clerk.

The court shall fix such fees for the services of the clerk as to the court shall seem proper, except when otherwise provided by law. The clerk shall also receive from the state in addition to his fees, \$5 per day during the actual court sessions. The amount for per diem and for all allowed by law in criminal and state cases, accompanied by an itemized bill of costs

in each case shall, on being fixed and allowed by a majority of justices, be paid semi-annually in the months of June and December from treasury.

Wis. Stats., sec. 2417, p. 1741.

Duties.

It shall be the duty of the clerk:

1. To have and keep the custody of the seal of the court and all books, records and papers thereof, and all writs, proceedings and papers in any action.
2. To safely keep and pay over or deliver according to law or order of court, all moneys or property deposited in his possession as clerk.
3. To furnish any person requiring the same certified copies of papers, records, opinions and decisions in his office upon receiving his fees therefor.
4. To furnish to the reporter copies of all opinions required by him at a fee not to exceed 6 cents per folio.
5. To issue writs and process to persons entitled to the same by law or the rules and practices of the court.
6. To make a calendar of cases for argument at each term and arrange the cases by circuits and place the causes from the circuit which had precedence at the preceding term last upon the calendar.
7. To give certificates to attorneys on their admission to practice on receiving his fee therefor, but the fee for a certificate of admission of any graduate of the law department of the U. W. shall not exceed \$1.

Wis. Stats., sec. 2416, p. 1741.

Stenographers and copyists.

Each justice may appoint a stenographer and copyist to render assistance as may be required and may remove him at pleasure and appoint another. Each justice shall certify such appointment to the Secretary of State and shall also notify him of the termination of service. The compensation of such employee shall be fixed by the justice appointing him, but not exceed \$100 per month.

Wis. Stats., sec. 2400, p. 1727.

Crier.

The justices may appoint a crier who shall attend the terms thereof and perform all duties required of him by law or by said court or the justices. He shall be allowed \$2 for each day's

actual attendance upon such duties, to be audited upon the written allowance of the chief justice, or one of the justices and paid out of the treasury.

Wis. Stats., sec. 2401, p. 1727.

Terms of court; quorum; adjournments; no quorum.

There shall be held in the supreme court room two sessions in each year, to be called the January and August terms. The January term shall commence on the Tuesday next preceding the second Wednesday in January, and the August term on the second Tuesday in August.

Three of the justices shall constitute a quorum for hearing and deciding all cases, actions and proceedings and for all transaction of business.

The justices present less than a quorum in the absence of the others may adjourn the court to a day in the same term. In absence of all justices such adjournment may be made to a day appointed in an order signed by three or more and filed with the clerk. In case of the absences of all justices and their failure to make such order the clerk may adjourn the court from day to day for six days, and if the court shall not be opened then all matters pending therein shall stand continued until the next term.

Wis. Stats., secs. 2402, 2403, 2404, p. 1728.

Postage; stationery.

All necessary postage and stationery is allowed.

Wis. Stats., sec. 169, p. 258; sec. 290, p. 301.

Salaries.

The salaries of the judges is \$6,000 annually, and shall be payable in advance quarterly.

Wis. Stats., sec. 170, p. 259; sec. 171, p. 263, amended by ch. 138, L. 1901.

Decisions to be in writing.

The state printer shall print for the use of the justices so many decisions and opinions and at such times as shall be directed by them.

Wis. Stats., sec. 2410, p. 1740.

Judgment against the state.

Duty of clerk as to judgments against the state.

Wis. Stats., sec. 3203, p. 2207.

Court reporter and proof reader.

The court shall from time to time appoint, subject to removal, a competent person to report and publish such decisions and opinions of court as they may deem important and expedient to be reported and published at a salary of \$3,000 annually. Such reporter shall give a bond of \$2,000 as herein required.

The justices may appoint a proof reader or clerk to the court reporter, who shall receive such compensation as justices deem reasonable, not exceeding \$125 per month. Said appointment shall be made in writing and filed with the Secretary of State.

Wis. Stats., sec. 346, p. 318; sec. 170, p. 259, amended by ch. 226, L. 1901.

Authority to employ additional help.

The justices are authorized to employ additional help for the reporter, the expense not to exceed \$1,000 annually.

Ch. 323, L. 1899.

Publication of reports.

The court reporter shall as soon as practicable after court decisions are announced, publish same in volumes with a brief abstract of the case and briefs of counsel when necessary, with suitable notes of the points decided in each case and index. Each of said volumes shall contain at least 750 and not more than 800 pages, and of the same style and quantity as volume 39 of the Wisconsin reports, to be approved and accepted by a majority of justices.

Details for contract of printing same see 347b, page 318, as amended by Ch. 118, L. 1901.

Wis. Stats., sec. 347a, p. 318.

Trustees of.

The justices and Attorney General shall be ex-officio trustees of the state library, and shall have full power to make and enforce by suitable penalties such rules and regulations for the custody, superintendence, care and preservation of the books and other property contained in said library, and for the arrangement thereof as to said trustees shall seem necessary and proper.

Wis. Stats., sec. 367, p. 324.

A messenger for law library may be appointed by the trustees who shall receive a compensation of \$100 per month, and one or more janitors for service in or about the library and rooms of the justices and fix compensation.

Such appointments and compensation shall be certified to the Secretary of State by the chief justice and paid on Secretary of State warrants.

Wis. Stats., sec. 2400, p. 1727.

DISBURSEMENTS ON ACCOUNT OF THE SUPREME COURT

For the year ending Sept. 30, 1900.

Salaries of five judges	\$25,000 00
Salaries of nine persons, "services" of two persons under ch. 328, L. 1899, including "per diem" of two persons, and clerk's fees in state cases	12,647 30
Printing, including cost of paper and waste, per report Commissioners Printing	450 17
Postage and P. O. box rent	463 70
Telephone	24 00
Stationery, per report Superintendent Public Property	165 38
Total	<u>\$38,755 55</u>

Pages 173, 174, 488 and 500 in the report of the Secretary of State for the year ending Sept. 30, 1900.

STATE LAW LIBRARY.

Trustees of.

The supreme court justices and the Attorney General are trustees of this library, and have full power to make and enforce such rules and regulations as they shall deem necessary and proper.

Wis. Stats., sec. 467, p. 324.

Librarian, bond, term and salary.

They shall appoint a librarian. His term of office is two years, from the first Monday in January in the year appointed. Before entering upon his duties he shall give a bond of \$10,000, approved by the trustees, as herein provided.

His salary shall be \$2,000 annually.

1. That said library shall be kept open every day during the sessions of the supreme court and of the legislature, and on other week days and during hours they may direct.
2. That books may be borrowed therefrom under proper restrictions, by any state officers or member or officer of the legislature, subject to limitations herein provided.

Wis. Stats., sec. 369, p. 324.

Catalogue.

The trustees may direct that a catalogue thereof be printed.

Wis. Stats., sec. 370, p. 325.

Rules and regulations.

Trustees shall provide by rules:

Wis. Stats., sec. 368, p. 324.

Purchase of books.

They shall procure for the library and for the justices of the supreme court law and reference books and works on political science and statistics, but no others.

There is appropriated to pay for same \$3,500 per year. The accounts for such purchases shall be audited by the Secretary of State upon affidavits by the state librarian that the books have been received and upon approval of trustees. Any balance of money appropriated which remains unexpended at the close of any year shall be credited for the purposes specified, and may be used therefor in any subsequent year.

(See subdivision 7 of sec. 372, next page.)

Wis. Stats., sec. 371, p. 325.

Duty of librarian.

1. To give his personal attention at the library.
2. To keep an account of all books or pamphlets added to the library and of all lost, destroyed, worn out or sold during his term, specifying dates, cost, values and other material facts.
3. To keep a full and accurate catalogue of the library, noting all changes at the time when made; and when directed by the trustees, to cause same to be printed.
4. To keep a true account of every book or pamphlet taken from the library as herein provided.
5. To report to the presiding officers of legislature as herein provided the books taken out of the library by members and not returned. Such books shall be immediately returned.
6. To sue for every fine, penalty or forfeiture incurred by violation of the rules and regulations prescribed by the trustees.
7. To forward to the library of congress one copy of the supreme court reports and two copies of the legislative journals, laws and public documents published by the state, and one copy of each such publications and of the Blue Book to the several states and territories which practice comity.

He may exchange statutes, laws and documents with libraries of foreign governments. His account for the expenses of transporting books when fixed by the Secretary of State to be paid out of the state treasury.

Wis. Stats., sec. 372, p. 325.

Books to be delivered.

The acts of congress received to be deposited in library and be distributed as the trustees direct. Every officer of the state who shall receive laws, reports or other documents of any other state or territory of the United States or of any officer thereof, shall immediately deliver the same to the state librarian.

Wis. Stats., sec. 37, p. 326.

Stationery, postage.

The Superintendent of Public Property shall furnish the state librarian with necessary postage and stationery for his official correspondence.

Wis. Stats., sec. 20, p. 30; sec. 169, p. 258.

Appointees for library.

The trustees may appoint a messenger for such library, who shall receive a compensation of \$100 per month; and one or more janitors for service in and about the library and rooms of the

justices of the supreme court and fix his or their compensation. Such appointments shall be certified to the Secretary of State by the chief justice.

Wis. Stats., sec. 2400, p. 1727, amended by Laws, 1901.

State librarian authorized to certify copies of laws or opinions.

The librarian may make certified copies of the opinion of any court or of any statute, law, act or resolution of any state or territory or of any foreign country, contained in any book in the state library, and the same so made and certified shall be received as prima facie evidence of the contents of such opinion, statute, law, act or resolution. He shall receive therefor such fees as are provided by the rules of the supreme court for certified copies of opinions made by the clerk of said court.

Laws of 1899, ch. 351, sec. 47, p. 656.

DISBURSEMENTS ON ACCOUNT OF THE STATE LAW LIBRARY.

For the year ending Sept. 30, 1900.

Salaries of librarian and two employees	\$3,644 00
Binding	719 75
Postage and expressage	140 93
Books, law journals and reviews	4,178 62
Stationery per report superintendent public property	32 79
Total ..	\$8,716 09

Pages 174, 175 and 500 in the report of the Secretary of State for the year ending Sept. 30, 1900.

BOARD OF LAW EXAMINERS.

Duties; who admitted to practice.

The supreme court shall, as herein provided, appoint five competent resident attorneys who shall constitute a board of examiners of applicants for admission to the bar. Such board shall meet once or more each year at such times and places as the supreme court shall direct, for the purpose of examining such applicants. The board shall issue to such applicants as they find of sufficient legal learning and otherwise qualified a certificate of admission to the bar.

The residence and age of the applicant shall be shown. Satisfactory evidence shall be produced by applicants of good moral character having sufficiently pursued the study of law.

Three members shall constitute a quorum.

The examination papers shall be examined by the board; they shall mark the answer to each question upon the same with the percentage of standing, and within 30 days the papers shall be returned to him showing his standing.

Wis. Stats., sec. 2586—6, p. 1783.

Compensation.

There shall be paid out of the treasury to each such examiner a compensation not exceeding \$10 per day and his actual and necessary expenses in going to and from such examination, also for time necessarily expended in the preparation of questions and the actual cost of procuring question books for oral examination, if they shall, in the judgment of the board, be necessary, to be fixed and certified by one of the justices of the supreme court.

Printing.

The state printer shall print such questions as may be necessary for conducting examinations.

This act provides conditions under which the Secretary of State as auditor may approve vouchers for transportation.

Ch. 426, L. 1901.

DISBURSEMENTS ON ACCOUNT OF THE STATE BAR EXAMINERS.

For the year ending Sept. 30, 1900.

Per diem and expenses of examiners	\$1,793 07
Printing blanks, including cost of paper and waste, per report Commis- sioners Printing	79 45
Total	<u>\$1,872 52</u>

Pages 175 and 488 in the report of the Secretary of State for the year ending Sept. 30, 1900.

CIRCUIT COURTS.

Only the provisions in the Wisconsin Stats. which are of special interest to the general public are here given.

Salaries.

Salaries of judges shall be \$4,000 annually and \$400 for expenses, payable quarterly in advance.

Wis. Stats., sec. 170, p. 261; sec. 171, p. 263, amended by ch. 138, L. 1901.

Terms of judges.

The term of office of the judges of the circuit courts, when elected for a full term, shall commence on the first Monday of January next succeeding their election; and when elected to fill a vacancy shall commence on the first Monday of June next succeeding their election, and they shall hold for the residue of the term only.

Wis. Stats., sec. 2418, p. 1742.

Oath of office.

Every person elected or appointed judge of the circuit court shall before entering upon the duties of his office take and subscribe the constitutional oath of office, and file the same, duly certified, in the office of the Secretary of State.

Wis. Stats., sec. 2419, p. 1742.

State tax on actions.

In each action in a court of record having civil jurisdiction there shall be levied a tax of \$1, which shall be paid to the clerk at the time of commencement thereof, which tax on suits in the circuit courts shall be paid into the state treasury and form a separate fund to be applied to the payment of the salaries of the circuit judges; and which tax in other courts of record the salaries of the judges of which are wholly paid by the counties or by any county and city jointly shall be paid to the county treasurer to create a fund to be applied to the payment of the salaries of such judges.

Wis. Stats., sec. 2939, p. 2069.

Reporters.

Provides that judges may appoint reporters.

Wis. Stats., sec. 2437, p. 1755.

Compensation of reporters.

Every reporter shall be allowed such daily compensation as shall be fixed by the judge, not over \$10 for each day's actual attendance upon the court when required by the judge to attend, which shall be certified, audited and paid in the manner provided by law for the payment of the sheriff for attending where he is not paid a salary.

But one such reporter shall be employed at the same time in the same court, except when two judges are holding court in the same county at the same time as is provided in section 2432, when the regularly appointed reporter of the circuit in which court is so held shall employ a reporter to attend upon the court held by the judge who is called in and who shall report the proceedings of the court held by such judge. The reporter appointed for such purpose shall receive \$10 for each day he shall attend court, which shall be paid by the county in the same manner as the regularly appointed reporter is paid.

Wis. Stats., sec. 2438, p. 1756.

When paid by the state.

If the compensation paid by the counties to the regularly appointed court reporter of any circuit shall not equal \$2,000 per year, the deficiency shall be paid out of the state treasury and a warrant shall be issued therefor to any such reporter on his filing with the Secretary of State a certificate, signed by the circuit judge, showing the amount of such deficiency.

DISBURSEMENTS ON ACCOUNT OF CIRCUIT COURTS

For the year ending Sept. 30, 1900.

Salaries of seventeen judges	\$69,673 90
Salaries of reporters (fifteen), where fees inadequate.....	9,850 80
Total	\$79,524 70

Page 175 in the report of the Secretary of State for the year ending Sept. 30, 1900.

STATE HISTORICAL SOCIETY.

This society is a trustee of the state of Wisconsin and holds all its property as such. The state appropriation to this society beginning with its present fiscal year is \$20,000 annually besides \$4,800 for salaries to the secretary, librarian and assistant librarian. There is also furnished the secretary and paid by the state, postage, stationery, printing and binding, telephone and telegraph, freight and express which amounted in 1900 to \$5,227.25.

Salaries and expenses are paid also out of funds which have been entirely under the control of the society and which the Auditor has not passed upon. The new accounting system provided for by chapter 433 of the laws of 1901 will change the manner of doing business of this society and all other societies, boards, departments, commissions and institutions acting for or in behalf of the state, but as elsewhere explained the system therein provided is to be established by the governor and made applicable to the needs of all interests. See *ante*, page 368.

STATE HISTORICAL SOCIETY.

Powers of; executive committee; real estate.

The Society shall possess the powers conferred by the legislature, March 4, 1853, subject to this chapter (24) and laws hereafter enacted.

It is trustee of the state and shall hold all collections and property for the state. It shall not mortgage or dispose of any property without authority of law.

There shall be an executive committee of which the Governor, Secretary of State and State Treasurer are ex-officio members, and take care that the interests of the state are protected.

The Society may, on advice of its finance committee, sell or convey real estate.

Officers of; salaries paid out of general fund; binding.

The Society shall have a secretary at \$2,000 annually, a librarian at \$1,600 annually; may employ assistant librarian not over \$1,200 annually.

Reports, newspaper file, circulars, blank periodicals and labels may be bound at state expense.

(Other salaries and expenses are paid out of funds in possession of the Society which the state auditor does not pass upon.)

Wis. Stats., sec. 375, p. 327; sec. 170, p. 261.

Printing for Historical Society.

Two thousand five hundred copies of the collections of the Society shall be printed not to exceed 500 pages and shall be bound in cloth.

One thousand two hundred copies of the report of the proceedings of the Society shall be printed.

The commissioners may authorize the printing of such special class catalogues as the library committee of such Society shall deem essential.

Wis. Stats., sec. 340, p. 316.

Duties of Society; appropriation.

1. To collect books, maps, charts and other papers and materials illustrative of this state and the west.
2. To procure narratives from early pioneers.
3. To procure facts and statements as herein set forth.
4. To purchase books, maps, charts and materials as herein provided.
5. To bind books, documents and newspaper files containing legal notices.
6. To catalogue entire collections.
7. To publish biennially a report of collections and other matters.
8. To keep its rooms open reasonable hours for reception of state's citizens.

The state appropriation is \$15,000 annually from the general fund. The executive committee shall keep a correct account of the manner of expenditure of the money so appropriated and report in detail to the Governor.

Wis. Stats., sec. 376, p. 327.

Appropriates \$5,000 annually to the Society for the purchase of books, periodicals, maps, etc.

Ch. 155, L. 1901.

Historical reports.

The reports of the transactions of the Society shall be delivered to the secretary of said Society.

Wis. Stats., sec. 361, p. 323.

Postage.

The Society shall be furnished with postage and stamped envelopes for official correspondence.

Wis. Stats., sec. 169, p. 258.

Stationery.

It shall be furnished with necessary stationery by the Superintendent of Public Property.

Wis. Stats., sec. 290, p. 301.

Meetings.

The State Historical Society may provide for annual or other meetings of officers or representatives of such auxiliary society, at times and places to be fixed by its Society.

Wis. Stats., sec. 376e, p. 329.

Reports of local societies.

Any local society may make a report of its work annually to the State Society, which, or portions of, may be included in the publications of said State Society, and upon application of any auxiliary society the State Society may become custodian of the records of such society.

Wis. Stats., sec. 376c, p. 328.

DISBURSEMENTS OF THE STATE ON ACCOUNT OF THE STATE HISTORICAL SOCIETY

For the year ending Sept. 30, 1900.

State appropriation, transferred to the treasurer of the society.....	\$5,000 00
Salaries ..	4,800 00
Etchings and printing, including cost of paper and waste, per report	
Commissioners Printing	4,451 91
Postage and P. O. box rent	401 00
Telephone and telegrams	67 44
Expressage ..	150 26
Stationery, per report Superintendent Public Property.....	156 64
Expenses of removal to new building (Ch. 204, L. 1899).....	835 92
Total ..	\$15,863 17

Pages 176, 488 and 500 in the report of the Secretary of State for the year ending Sept. 30, 1900.

*This does not include payments made out of funds which have been entirely under control of the Society.

FREE LIBRARY COMMISSION.

NOTE.—This Commission is embraced within the provisions of the centralized accounting contemplated by Ch. 433, L. 1901. See ante, p. 368.

How constituted; officers; appropriation.

Two persons appointed by the Governor, with the President of the University, State Superintendent and the secretary of the Historical Society, shall constitute a state library commission. They shall be appointed for five years and vacancies shall be filled by the Governor for the unexpired term. The officers of the board shall be a chairman, elected from their own number, for a term of one year, and a secretary not from their own number, to be appointed by the commission and who shall serve at the will of the commission. Commission may also engage other clerks and such assistants as may be required. The commission shall give advice to all free libraries and to all communities which may propose to establish them. No member of the Commission shall receive compensation but shall be reimbursed actual and necessary expenses in traveling. There is annually appropriated to the Commission \$7,500 and any balance not expended in any one year may be added to the expenditure for any ensuing year.

Wis. Stats., sec. 373a, p. 326, as amended by ch. 161, L. 1899.

This act appropriates \$1,500 to the Commission for the purpose of special cataloging public documents.

Ch. 168, L. 1901.

Office; printing.

The Commission shall be allowed a suitable office in the capitol or Historical Library building, and the Secretary of State shall audit the certified bills of the Commission, and the state printer shall print such circulars, labels and blanks as may be required.

Wis. Stats., sec. 373b, p. 326.

The report of the Commission shall be limited to fifty (50) pages.

Wis. Stats., sec. 335b, p. 314.

To conduct summer school.

The Free Library hereby has the power to conduct a summer school of library science in connection with the summer school of the U. of W., and to hold librarians' institutes in various parts of the state.

Ch. 161, sec. 1, p. 236, L. 1899.

Postage; stationery.

It shall be furnished with necessary postage and stationery.

Wis. Stats., sec. 169, p. 258; sec. 290, p. 301.

This act provides for the cataloguing and distribution of public documents and adds to the Stats. the new sections, 373c, 373d, 373e, 373f, 373g, 373h, 373i.

Ch. 168, L. 1901.

This act defines the duty of the Commission in connection with the distribution of the public documents of the state to libraries throughout the state, and to keep on file for the use of the legislature, state departments, etc., a working library of public documents co-operating with the State Historical Society, as herein provided.

The Commission shall receive a copy of the report of the free libraries.

Ch. 96, L. 1901.

DISBURSEMENTS ON ACCOUNT OF THE FREE LIBRARY COMMISSION

For the year ending Sept. 30, 1900.

Salaries and travelling expenses	\$6,880 80
Merchandise and books	665 70
Postage and P. O. box rent	382 90
Telegrams and expressage	92 52
Printing and binding, including cost of paper and waste, per report	
Commissioners Printing	586 40
Cartage and lumber	89 17
Stationery, per report Superintendent Public Property	54 07
Total	\$8,751 56

Pages 177, 488 and 500 in the report of the Secretary of State for the year ending Sept. 30, 1900.

GEOLOGICAL AND NATURAL HISTORY SURVEY.

By this law of 1897 there is constituted a geological and natural history survey of the state.

Ch. 297, secs. 1-6, pp. 637, 638, 639.

Object.

The completion of the geological survey of the state, and especially the examination of rocks,, with reference to the occurrence of iron ores, building stones and other valuable mineral products, and in reference to their value as material for road construction.

A study of the soils of the state.

A study of the plants of the state and especially of the forests with reference to their cultivation and preservation.

A study of the animal life of the state and especially the occurrence, distribution and production of fish in the lakes and streams of the state and a study of foods and energies of fish.

The preparation of an account of the physical geography and natural history of the state, in such form as to serve as manuals for the public schools, and of special reports of economic importance. The completion of the topographic map of the state begun by the U. S. Geological Survey; but no money shall be expended for topography unless an equivalent amount be expended for this purpose in the state by the U. S. government.

This survey shall be governed by a Board of Commissioners, consisting of the Governor, State Superintendent, President of the University of Wisconsin, President of the Commissioners of Fisheries and the President of the Wisconsin Academy of Science and Arts.

The Commissioners shall meet at such time and places as they may prescribe. A majority is a quorum. They receive no compensation, but each shall be reimbursed their actual expenses incurred in the performance of their duties.

Their officers shall be as their by-laws prescribe.

They have general charge of the survey and appoint a superintendent and such assistants as they deem necessary.

They shall fix the compensation of all persons employed and remove them at pleasure.

They shall prepare a report before the meeting of each legislature, showing progress and condition of survey, an account of money spent, together with such other information as herein required.

If approved by the Commissioners special reports of the superintendent shall be transmitted to the Commissioners of Public Printing, who may have them published as reports, as bulletins of the University, or in the transactions of the Wisconsin Academy of Sciences and Arts. If published as independent reports, the Commissioners of Printing shall decide as to the number of copies. Five copies of each report shall be delivered to each member of the legislature.

The Commissioners shall be furnished with all necessary postage and stationery.

The remainder of the independent reports may be sold by the Commissioners as the interest of the state and science demands.

After material collected shall have served the purpose of the survey, it shall be distributed to the University, the colleges of the state, the state normal schools and the free high schools of the state under the approval of the Commissioners in such a manner as to be of the greatest advantage to education in the state.

There is annually appropriated for two years to the Commissioners \$5,000, the first appropriation to be paid in the current fiscal year (1897).

This act appropriates \$5,000 annually to this survey.

Ch. 375, L. 1901.

The Wisconsin statutes of 1898 contain no reference to this Commission for the reason that the revisors considered its work done.

DISBURSEMENTS TO THE GEOLOGICAL AND NATURAL HISTORY SURVEY

For the year ending Sept. 30, 1900.

Salaries, services and expenses in travelling	\$8,988 10
Merchandise, drayage and freight	1,650 62
Maps, plates, etc.	2,900 76
Expressage	427 80
Printing, including cost of paper and waste, per report Commissioners Printing	4,074 11
Total	<u>\$18,041 39</u>

Pages 177, 178 and 488 of the report of the Secretary of State for the year ending Sept. 30, 1900.

SUPERINTENDENT OF PUBLIC PROPERTY.

The duties and responsibilities of this officer differ essentially from those of any other official of the state. He has charge of the capitol grounds, capitol buildings and personal property connected therewith belonging to the state, also the executive grounds, residence and personal property therein contained.

He is charged with the purchase of stationery for the state officials and departments and distribution thereof to the legislature and various officials of the capitol building.

His appointments are largely employed for the general good of all state business done in the capitol building. Employees in his own department are limited to a chief clerk and messenger.

SUPERINTENDENT OF PUBLIC PROPERTY.

Appointment, term, oath, bond.

He is appointed by the Governor, term commencing at same time as elective state officers, continuing two years and until successor qualifies unless sooner removed. Governor shall fill any vacancy for balance of term.

Before entering upon duties he shall take required oath and give \$15,000 bond with four sureties to be approved by the Governor. Bond and oath to be deposited in the executive office.

Wis. Stats., sec. 286, p. 299.

Salary.

His salary shall be \$2,000, including his services as purchasing agent.

Wis. Stats., sec. 170, p. 260.

What to have charge of.

He has charge of capitol and public grounds, executive residence, movable state property not by law in charge of some other officer. He shall not interfere with rooms appropriated for the use of the legislature while so occupied. This act authorizes the superintendent in connection with repairing the capitol building for which is appropriated \$8,000.

Wis. Stats., sec. 287, p. 299.
Ch. 350, L. 1901.

Provides for changes in the capitol building for the convenience of the legislature.

Ch. 452, L. 1901.

Appointments he may make; salaries; improvements and purchases.

He shall, with the approval of the Governor, appoint:

An assistant clerk, at \$1,400 annually, and employ—

One chief engineer, at \$1,200 annually.

One assistant engineer, at \$1,080 annually.

One second assistant engineer, at \$960 annually.

One state carpenter, at \$1,000 annually.

One assistant carpenter, at \$900 annually.

One second assistant carpenter, \$780 annually.

Two firemen, at \$780, each, annually.

One painter, at \$900 annually.

One assistant painter, at \$780 annually.

One gas fitter and plumber, \$840 annually.

One receiving and shipping clerk, at \$900.

Eight policemen at \$744, each, annually.

Two nightwatchmen, at \$744, each, annually.

One elevator operator, at \$744 annually.

Twelve janitors at \$744, each, annually.

One carpetman, at \$744 annually.

One cuspidor cleaner at \$660 annually.

Fourteen regular laborers, at \$660, each, annually.

Five scrub women, at \$1.25 per day when employed.

One stenographer for his own office at \$720 annually; for his own and Railroad Commissioner's office.

Wis. Stats., sec. 288, p. 300; sec. 270, p. 260, amended by ch. 418, L. 1901.

He may employ additional help not to exceed \$6,000 per year.

Ch. 419, L. 1901.

He shall keep the capitol, grounds and executive residence in proper condition, make improvements authorized by law under direction of the Governor, purchase all supplies, except stationery, and furniture, fixtures, required for state use in and about the capitol. When the purchase of furniture exceeds \$100 he shall receive three proposals and let to lowest bidder.

Stationery, proposals and contract for.

He shall provide for inspection, samples of necessary stationery, and furnish specimens thereof to prospective bidders for furnishing such stationery.

Advertise for proposals for stationery, two papers each in Madison, Milwaukee and Chicago, weekly for four weeks, and let the contract to the lowest bidder furnishing satisfactory security.

Preference shall be given to a state bidder, if cost is as low as others.

Purchase of stationery shall be within appropriation, and an itemized bill therefor filed with the Secretary of State.

Wis. Stats., sec. 289, p. 300.

Stationery, who entitled to.

He shall have charge of and distribute state stationery, charge himself with its actual cost; keep separate accounts with each officer, body or institution to whom furnished; furnish stationery as provided by law to the legislature and the Lieutenant Governor, and to the following officers for their offices on written order:

To Governor or private secretary.

Secretary of State or his assistant.

Chief clerk of land office.

State Treasurer or his assistant.

Treasury Agent.

Attorney General or assistant.

State Superintendent or assistant.

Clerk of Supreme Court.

Secretary or Librarian of State Historical Society.

Adjutant General or assistant.

Quartermaster General or assistant.

Secretary of Board of Agriculture.

Railroad Commissioner or deputy.

Secretary of Board of Control.

State Librarian.

Commissioner of Labor Statistics.

Superintendent of Public Property.

Dairy and Food Commissioner.

Commissioners of Fisheries.

State Fish and Game Warden.

Secretary of Free Library Commission.

Bank Examiner or his deputy.

Wis. Stats., sec. 290, p. 301.

Commissioners of Taxation.

Ch. 206, L. 1899.

No clerk or any state officer, or any department of the state, shall be permitted to receive any stationery unless on a written order of some of the persons above described.

How stationery charged; report.

He shall charge to each state officer, to supreme court, to the legislature and to every other officer and institution all stationery furnished at the cost price of the same, and he shall annually, on Sept. 30, make a report to the Governor of the affairs of his office. * * *

He shall file with the Secretary of State a duplicate of report herein provided, and the Secretary shall cause a summary of it to be published in connection with his biennial report.

Wis. Stats., sec. 291, p. 301.

This act provides for an additional report to be made to the Governor before Jan. 10, each odd-numbered year.

Ch. 97, L. 1901.

Stationery; provision exclusive.

He shall furnish at the opening of every session of the legislature stationery to the Lieutenant Governor, to the chief clerks, upon their written request, specifying the quantity and kinds required and the purpose, as much as shall be necessary for the business of the legislature.

No other stationery than is above provided for shall be furnished any officer or employee of the legislature except pursuant to law.

Wis. Stats., sec. 114, p. 236; sec. 115, p. 236.

This act appropriates \$8,000 for the purchase of stationery for the state officers of departments for the years 1901 and 1902.

Ch. 216, L. 1901.

Postage.

He is entitled to necessary postage stamps and stamped envelopes for the use of his department for official correspondence.

Wis. Stats., sec. 169, p. 258.

Purchases, who to make.

The Superintendent only shall purchase for the state stationery to be used about the state offices or institutions, by which law he is authorized to furnish, or contract for the state fuel, fixtures, carpets, furniture, gas or other article or thing to be used in man about the capitol, executive residence or public grounds. man about the capitol, executive residence or public grounds.

All claims and demands for payment from the state on such account shall, when presented for payment, be accompanied with a certificate of said Superintendent.

Wis. Stats., sec. 292, p. 301.

Supreme court reports and digest.

He shall purchase so many copies of the Wisconsin Digest of Reports, and such volumes of reports as may be required to complete such sets as may be called for to supply new courts and counties and also such reports as may be required by state librarian to make exchanges with other states and territories.

Wis. Stats., sec. 292a, p. 302.

Claims, how made and paid.

All claims and demands against the state under the provisions of this chapter, accompanied by the certificate required in the preceding section, certified to as correct and necessary by the said Superintendent and approved by the Governor, shall be paid out of the state treasury.

Wis. Stats., sec. 293, p. 302.

Sale of unused property.

At his request the Governor, Secretary of State and State Treasurer shall examine any chattel property not in use at any time, and they shall direct sale or disposal of same.

Wis. Stats., sec. 294, p. 302.

Proceeds of sale.

He shall pay the money received for property disposed of under the preceding section to the Treasurer, and his receipt duly countersigned, together with a copy of the order of sale and an account of sale, approved by the board, shall be the voucher for the Superintendent representing the articles sold.

Wis. Stats., sec. 295, p. 302.

Delivery and custody of paper.

All paper purchased shall be delivered to the Secretary of State and by him delivered to the Superintendent of Public Property who shall, upon receipting for it, be custodian, and shall issue it to the State Printer upon order of the Secretary of State.

Wis. Stats., sec. 310, p. 307.

Distribution of reports.

The transactions and reports provided for in section 335e, page 315, shall be distributed by the Superintendent of Public Property as follows:

Each member of the legislature, 15 copies.

State Historical Society, 50 copies.

Each county agricultural society and district industrial association, which embraces two or more counties and furnishes the State Board of Agriculture copy of its proceedings, 10 copies.

Each of the societies and the board therein named, 50 copies each of the transactions of the others.

Library of the University and each elective state officer, 25 copies.

Superintendent of agricultural institutes, 50 copies.

Superintendent of Public Property, 10 copies.

Commissioner of Labor Statistics, 10 copies.

Adjutant General, 10 copies.

Quartermaster General, 10 copies.

State Board of Health, 10 copies.

Each public library, 2 copies.

Each normal school, 2 copies.

Each charitable, reformatory and penal institution, 1 copy.

The remaining copies shall be delivered to said board and the respective societies for distribution by the proper officers.

Wis. Stats., sec. 336, p. 315.

Custodian of public documents and supreme court reports.

All public documents and supreme court reports shall be delivered to the Secretary of State and receipted for by him, and he shall deliver the same to the Superintendent of Public Property, who shall be custodian thereof and shall distribute the same in the manner provided by law, keeping such records as shall be necessary to show the number, date and to whom such documents were delivered.

Wis. Stats., sec. 348, p. 320.

To procure seal for supreme court when required.

Wis. Stats., sec. 2415, p. 1741.

The Superintendent of Public Property shall deliver to the state librarian as many copies of supreme court reports, legislative journals, laws and documents as may be required for purposes specified in secs. 352 and 372-7 of Wis. Stats.

Wis. Stats., sec. 349, p. 320.

Laws, etc., for members and officers of legislature.

He shall send, as soon as issued, at state expense, one copy of Senate and Assembly journals, of the bound volumes of the public documents, and of the laws, to each member of the legislature which enacted such laws, and of the proceedings of which such journals are the records, and also one copy of each of the above to the Lieutenant Governor and the chief clerk and sergeant-at-arms of each house.

Wis. Stats., sec. 350, p. 320.

How distribution of Blue Book is to be made.

Wis. Stats., sec. 121, p. 237.

Documents for institutions, etc.

One copy each of all documents published by the state shall be delivered to the several state institutions, State University and normal schools, and also to each college, incorporated academy and literary institution of Wisconsin having a library of 300 volumes.

The several state officers shall be furnished with such documents as may be necessary for their respective offices.

Wis. Stats., sec. 351, p. 321.

For the legislature.

There shall be delivered to the legislature for use of the members the number of copies of the reports of state officers, departments and boards herein specified.

Wis. Stats., sec. 353, p. 321.

Bound documents.

The Superintendent shall distribute one copy of the bound volumes of public documents to each state institution and to each county clerk and one to each free high school.

Wis. Stats., sec. 354, p. 321.

Distribution of session laws.

Wis. Stats., sec. 355, p. 322.

The Superintendent of Public Property shall have one copy of the laws, and such further copies as shall be necessary for transaction of business.

Ch. 351, L. 1899, sec. 9, p. 651.

Distribution of supreme court reports.

Wis. Stats., sec. 357, p. 322.

Duty of county clerk.

Each county clerk shall notify the Superintendent of the number of officers in his county entitled to receive copy of the laws.

Wis. Stats., sec. 359, p. 323.

Sale of documents, etc.

The Superintendent may sell to any citizen of Wisconsin a copy of each publication printed by State Printer at the cost price and he shall keep an accurate account of such sales and pay the amount into the state treasury at the end of each quarter.

Wis. Stats., sec. 360, p. 323.

Reports of Academy of Sciences, etc.

Distributions of the transactions of the Academy of Sciences, Arts and Letters.

Wis. Stats., sec. 365, p. 323.

Distribution, expenses of.

Provision made for distribution of books and packages too large or cost too much to be sent by mail.

Wis. Stats., sec. 366, p. 323.

Office supplies.

He shall furnish postage, stationery and office supplies to the tax commission.

Ch. 206, L. 1899, sec. 8, p. 343.

Distribution of books.

At the opening of each regular session of the legislature the Secretary of State shall deliver to the Superintendent of Public Property 137 copies of the Blue Book who shall then distribute the same to the members and elective officers thereof.

Wis. Stats., sec. 121, p. 237.

He shall procure the supreme court seal.

Wis. Stats., sec. 2415, p. 1741.

Injury to capitol, park, etc.; arrest; killing dogs; his duty regarding.

Wis. Stats., sec. 4444, p. 2704.

He is authorized by these acts to suitably furnish the new committee rooms for the legislature and provide new chairs for the Senate.

Ch. 1, 5, L. 1901.

He shall provide a Memorial Hall to be located in rooms 204, 205, and 207 in the capitol building to be dedicated to the soldiers and sailors of the Wisconsin regiments in the civil war.

Provision is made in this act at state expense of pens, ink, stationery and other supplies necessary for the use of the G. A. R. A janitor shall be appointed by the Governor, whose duty shall be to take proper care of the said rooms and said janitor shall be paid by the state.

Provision is made for the return of the battle flags to the capitol and for properly labelling each flag or banner and a concise history placed thereon.

\$15,000 is appropriated by this act.

Ch. 125, L. 1901.

This act authorizes him to contract for telephone and telegraph service for the use and business of the state.

Ch. 158, L. 1901.

Section 373g contained in this act directs the Superintendent to furnish the free library commission with necessary cards, shelving, library cases and other supplies.

Ch. 168, L. 1901.

He shall provide the Superintendent of Inspectors of Illuminating Oils with necessary instruments and apparatus for examining oils, to be paid for out of general fund.

Ch. 466, L. 1901.

DISBURSEMENTS ON ACCOUNT OF THE SUPERINTENDENT OF PUBLIC PROPERTY

For the year ending Sept. 30, 1900.

Salaries of sixty-nine (69) officials and employees	\$52,305 25
Salaries of twenty (20) and services of eight (8) persons.....	8,282 76
Total wages, salaries and services	60,588 01
Printing, including cost of paper and waste, per report Commissioners Printing	44 70
Postage and P. O. box rent	194 00
Telephone and telegrams	48 82
Expressage	289 07
Stationery, per report Superintendent Public Property	91 07
Incidental expenses and repair of closets	19,392 52
Cost of fuel and advertising for bids	3,303 09
Cost of electric light and gas	3,161 10
Total	\$87,112 38

Pages 179, 184, 191, 488 and 500 in the report of the Secretary of State for the year ending Sept. 30, 1900.

WISCONSIN NATIONAL GUARD.

The legislature of 1901, by chapter 228, repealed chapter 200 of the laws of 1899 which repealed chapter 34 of the Wisconsin statutes of 1898. In a compilation of this character it has not been thought wise to incorporate the details of the duties of the governor, adjutant general, quartermaster general and other officers of the guard.

If more specific information, particularly in relation to the powers and duties of the executive is desired, the act itself which is issued in pamphlet form by the adjutant general should be consulted.

WISCONSIN NATIONAL GUARD.

Adjutant General and Quartermaster General departments.

The Wisconsin National Guard consists of not over 40 companies of infantry, one battery of artillery, one troop of cavalry, an Adjutant General department, a Quartermaster and ordnance department, a subsistence department, a medical department, a pay department and such other officers as may be required.

Ch. 228, L., 1901.

Military Staff.

The military staff appointed by the Governor is as follows:

One Adjutant General, with rank of Brigadier General.

One Quartermaster General, with rank of Brigadier General.

One Surgeon General, with rank of Brigadier General.

One assistant adjutant general, with rank of Colonel.

One inspector of small arms practice, with rank of Colonel.

Five aides-de-camp.

One Quartermaster, with rank of Major.

One Paymaster, with rank of Major.

One Commissary of Subsistence, with rank of Captain.

One additional paymaster, with rank of Captain.

And such other officers as he may require. Each of the staff must have had previous military experience.

The Adjutant General is chief of staff and Inspector General, with an office in the capitol. He has charge of all military records, correspondence and documents not required to be filed with the Governor or Quartermaster General. He shall report to the Governor Oct. 1, each even-numbered year, setting forth the number and condition of the guard. An additional report is provided by this act to be made to the Governor each odd-numbered year. He shall transmit annual returns to the President required by U. S. laws and furnish the Governor a copy thereof. He shall assist Wisconsin claimants in attaining pensions, bounty or back pay, acting as attorney of record for them, for which service neither he nor his clerks shall have any compensation.

Ch. 97, L. 1901.

He shall pass upon all military accounts (which shall also be approved by the Governor before payment) and shall cause to be prepared all books, blanks and forms required by the W. N. G.

The Commissioners of Public Printing shall print, and Adjutant General shall distribute, 1,000 copies of the annual convention of National Guard officers.

The Adjutant General may purchase traveling libraries of military text books for each regiment.

The Quartermaster General is Commissary General and chief of ordnance, with an office in the capitol. His bond is \$20,000 with sureties approved by the Governor. He has charge of all Quartermaster stores, ordnance and ordnance stores, money and property belonging to the state. He has charge of all military property and must preserve and account for same and for moneys received and expended in such manner as the Governor may direct. He shall report Oct. 1 each even-numbered year to the Governor.

Provides for an additional report to be made to the Governor before Jan. 10, each odd-numbered year.

Ch. 97, L. 1901.

He may make contracts for troops, arms, etc., stores and other property under the direction of the Governor.

Compensation of Adjutant General is \$2,000 annually and necessary expenses, not exceeding \$500 annually; assistant adjutant general, \$1,400 annually; clerk and stenographer, \$1,200 annually; bookkeeper, \$840 annually; pension clerk, \$1,380 annually; Quartermaster General, \$1,000 annually; Assistant Quartermaster General, \$1,400 annually; quartermaster clerk, \$1,200 annually.

Wis. Stats., sec. 170, p. 261.

The following is a subject index of the laws affecting the Wisconsin National Guard:

Organization of militia.

Ch. 228, secs. 1, 24, 29, L. 1901.

Military staff of Governor.

Ch. 228, secs. 2, 3, L. 1901.

General powers and duties of Adjutant General.

Reports.

Ch. 228, sec. 4, L. 1901.

Adjutant General in charge of military accounts. (This section to be construed in connection with ch. 433 of L. 1901.)

Ch. 228, sec. 5, L. 1901.

He may procure from the Commissioners of Printing printed copies of report of National Guard convention.

Ch. 228, sec. 6, L. 1901.

He may procure traveling libraries.

Ch. 228, sec. 7, L. 1901.

He shall assist the Secretary of State in the preparation of blanks and instructions for enrollment of those liable to military duty when census is taken.

Ch. 228, sec. 8, L. 1901.

Quartermaster General. General powers and duties.

Bond.

Ch. 228, sec. 9, L. 1901.

His accounts; how kept. Reports. Subsistence.

Ch. 228, secs. 10, 16, L. 1901.

Arms and ordnance stores and supplies; issue of.

Ch. 228, secs. 11, 13, L. 1901.

Transportation to officers.

Ch. 228, sec. 12, L. 1901.

Labor on military reservation; provision for; issue of.

Ch. 228, sec. 14, L. 1901.

Custody of flags and colors.

Ch. 228, sec. 15, L. 1901.

Medical department; how organized; officers of; powers and duties of officers. Examination fees.

Ch. 228, secs. 17-22, L. 1901.

Pay department. Paymaster; powers and duties. Provisions affecting them.

Ch. 228, sec. 23, L. 1901.

Officers; powers, duties, compensation, penalties.

Ch. 228, secs. 30-47, L. 1901.

Enlisted men. Enlistments and re-enlistments. Terms; pay, discharge.

Ch. 228, secs. 48-51, L. 1901.

Company, band, troop and battery.

Ch. 228, secs. 54-61, L. 1901.

Encampments; provisions for.

Ch. 228, secs. 62-65, L. 1901.

Rules of discipline.

Ch. 228, secs. 66-75, L. 1901.

This act permits the use of money received from the U. S. government for improvements on the state military reservation at Camp Douglas.

Ch. 62, L. 1901.

Authorizes counties and cities to erect armories for the use of the W. N. G.

Ch. 241, L. 1901.

DISBURSEMENTS ON ACCOUNT OF THE WISCONSIN NATIONAL GUARD.

For the year ending Sept. 30, 1900.

Department of Adjutant General:

Salaries and travelling expenses	\$8,943 07
Merchandise	40 23
Printing, including cost of paper and waste, per report Commissioners Printing	446 14
Telephone and telegrams	122 31
Postage and P. O. box rent	773 50
Expressage	77 37
Payment of troops in camp, uniform fund, armory rent and "company commanders"	78,423 91
Stationery, per report Superintendent Public Property	128 91
Total	\$88,755 46

Pages 184, 188, 488 and 500 in the report of the Secretary of State for the year ending Sept. 30, 1900.

Department of Quartermaster General:

Salaries, services and traveling expenses	\$5,574 00
Printing, including cost of paper and waste, per report Commissioners of Printing	201 34
Telegrams and postage	116 37
Freight	3,068 59
Transportation	8,288 14
Expressage	99 15
Uniforms and other clothing	9,716 71
Lumber and insurance, and merchandise and services of surgeons	1,787 54
Building telephone line and miscellaneous expenditure	3,225 99
Stationery, per report Superintendent Public Property	13 82
Total	\$32,201 65

Pages 188, 190, 488 and 500 in the report of the Secretary of State for the year ending Sept. 30, 1900.

Total of W. N. G. for the year, \$120,957.11.

DISBURSEMENTS ON ACCOUNT OF THE SPANISH-AMERICAN WAR

For the year ending Sept. 30, 1900.

Adjutant General's department:

Services at Camp Harvey	\$125 73
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Quartermaster General's department:

Services at Camp Harvey	6 15
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Total	\$131 88
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U. S. war claims, 1861-1865:

Per diem and expenses	\$965 66
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Page 190 in the report of the Secretary of State for the year ending Sept. 30, 1900.

Total disbursements, \$122,054.65.

ACADEMY OF ARTS AND SCIENCES.

Report of.

There shall be printed biennially by the State Printer in pamphlet form 2,000 copies of the transactions of the Wisconsin Academy of Arts and Sciences, uniform in style with the volumes heretofore printed for said society.

Wis. Stats., sec. 341, p. 317, amended by ch. 197, L. 1901.

Distribution of reports.

One copy of the transactions shall be distributed to each member of the legislature, one copy to the librarian of each institution, 100 copies to the State Agricultural Society, 100 copies to the State Historical Society, 100 copies to the State University and the remainder to the Academy.

Wis. Stats., sec. 265, p. 323.

Distribution, expense of.

In the distribution of books and packages too large or cost too much to be sent by mail, they shall send them by freight or express and the accounts for such, properly certified to, shall be paid out of the state treasury.

Wis. Stats., sec. 266, p. 323.

The Secretary of State may authorize the State Printer to bind in suitable binding all periodicals which the society shall receive, at a cost not exceeding \$150, and shall audit the accounts therefor.

Ch. 186, L. 1901.

DISBURSEMENTS ON ACCOUNT OF ACADEMY OF ARTS AND SCIENCES

For the year ending Sept. 30, 1900.

Freight and expressage	\$79 63
Printing, including cost of paper and waste, per report Commissioners Printing	460 02
Total	\$539 65

Pages 192 and 488 in the report of the Secretary of State for the year ending Sept. 30, 1900.

UNIVERSITY OF WISCONSIN.

Established in 1838-9.

This institution is governed by a Board of Regents of fourteen members, two of whom (the President and the State Superintendent of Public Instruction) being ex-officio regents.

The income of the University and Agricultural College during the year ending September 30, 1900, was as follows:

Direct state appropriations in money for current expenses and buildings	\$124,798 43
Interest on productive funds	\$23,826 46
Income from gifts and interest on productive fund gifts.....	5,230 00
	<hr/> 29,066 46
Miscellaneous sources, including bills payable, collections from students, rents, material sold, insurance, sales of agricultural college farm and creamery products, etc.	181,220 75
Printing, illustrating, publishing, paper waste, etc., paid for by the state out of general fund, not included in above.....	6,022 11
	<hr/>
Total income other than from the U. S.....	\$641,097 80
Aid given by the United States	40,000 00
	<hr/>
Total income as shown by Regents' report, plus \$6,022.11 (see above)	\$681,097 80
Deducting difference between interest on productive funds reported by the Secretary of State, and the same reported by the Regents...	620 83
	<hr/>
Total income of University for one year, including \$79,000 borrowed, as compiled from pages 192, 216, 217, 219 and 488 of Secretary of State's report and transfers deducted.....	\$680,476 97

Chapter 433 of the laws of 1901 provides that all of the money collected by any officer or at any department or institution of the state, including the University, shall be deposited at least weekly or oftener if required by the Governor at the state treasury and that all disbursements must be made by warrant of the state Auditor after an itemized voucher therefor showing the details of the debt contracted has been filed with that officer.

For about thirty (30) years the Secretary of State acting as State Auditor has transferred legislative appropriations in round sums to the exclusive control of the Board of Regents and has exercised no supervision over the University disbursements.

During this period payments have been made by warrants signed by the Secretary of the Board of Regents upon the State Treasurer as treasurer ex-officio of that Board.

By the adoption fully of the unified accounting system the Auditor will pass upon all expenditures which must be certified to him by the Regents and will know from his records from day to day the receipts and expenses of each department, school or college and the condition of each fund.

UNIVERSITY OF WISCONSIN.

Proposition submitted to convention.

Among the propositions submitted to the constitutional convention was the following:

That the 72 sections, or two entire townships of land set apart and reserved for the use and support of a University by an act of Congress, approved June 12, 1838, entitled, "a seminary," are hereby granted and conveyed to the state to be appropriated to the use and support of such university, *in such manner as the legislature may prescribe.*

Wis. Stats., enab. act, sec. 7, subdiv. 2, p. 49.

State University—University fund.

Provision shall be made by law for the establishment of a state university at or near the seat of government, and for connecting with the same, from time to time, such colleges in different parts of the state as the interests of education may require. The proceeds of all lands that have been or may hereafter be granted by the United States to the state for the support of a university shall be and remain a perpetual fund to be called "the university fund," the interest of which shall be appropriated to the support of the state university, and no sectarian instruction shall be allowed in such university.

Const., art. 10, sec. 6, p. 120.

Commissioners of school and university lands.

The Secretary of State, Treasurer and Attorney General shall constitute a board of commissioners for the sale of the school and university lands and for the investment of the funds arising therefrom. Any two of said commissioners shall be a quorum for the transaction of all business pertaining to the duties of their office.

Const., art. 10 sec. 7, p. 120.

All moneys paid into the state treasury on account of the capital of the university fund shall be and remain a separate and perpetual fund as required by the constitution; and the interest derived therefrom and from unpaid balances of purchase money on sale of university lands and all other revenues derived from the university lands shall constitute the university fund income.

Wis. Stats., secs. 248, 249, p. 287.

Agricultural College fund.

Location and name of.

There is established at the city of Madison, Wis., an institution of learning by the name and style of "University of Wisconsin."

Wis. Stats., sec. 377, p. 330.

Board of regents; standing committees.

The government of the University shall vest in a Board of Regents, to consist of one member from each congressional district and two from the state at large, one of whom shall be a woman, appointed by the Governor.

The State Superintendent and the president of the University shall be ex-officio members of said board; said president shall be a member of all standing committees of board, having right to vote only in case of a tie. Regents' term of office is three years from the first Monday in February in year appointed unless sooner removed by the Governor, but appointments to fill vacancies shall be for residue of term only.

(This section was derived from sec. 5, ch. 114, L. 1866.) This law provided that the Secretary of State should be secretary of regents and State Treasurer should be the treasurer of regents. Ch. 13 of the Laws of 1869 amended by dropping the provision that the Secretary of State should be secretary of regents. Ch. 80, L. 1870; Ch. 135, 1872; and 378, Ann. Stats.

Wis. Stats., sec. 378, p. 330, amended by ch. 255, L. 1901.

Powers of board; officers' duties.

The Board of Regents and their successors are a body corporate by name of the "Regents of the University of Wisconsin," possessing all powers necessary or convenient to accomplish the objects and perform duties prescribed by law and have custody of books, records, buildings and other property of the University.

The Board of Regents shall elect a president and secretary and they shall perform duties prescribed by by-laws and board. Secretary shall keep faithful record of all transactions of Board or Executive Committee. State Treasurer shall be treasurer of

board and shall perform duties of such office subject to such regulations of board as are not inconsistent with his official duties; and he and his sureties shall be liable on his official bond as State Treasurer for faithful discharge of such duties.

(This section was derived from section 6 and part of sections 7, 10, ch. 174, 1866, and sec. 1, ch. 13, 1869.)

Wis. Stats., sec. 379, p. 330.

Note to above section.

The regents, as a corporation, have no powers except such as are conferred by statute, either expressly or by fair implication.
54 Wis., 159.

Meetings; quorum.

The board may determine by its by-laws the time for electing president and secretary and the duration of their respective terms, also the times for holding meetings and the manner of notifying the same. A majority of board constitutes a quorum, but a less number may adjourn from time to time.

Wis. Stats., sec. 380, p. 331.

Duties of regents; additional powers.

The board shall enact laws for government of the University in all its branches; elect a president and requisite number of professors, instructors and officers and employees and fix salary and term of office and determine qualifications of applicants for admission to instruction; but no sectarian or partisan shall be allowed in any department, and no sectarian or partisan tests shall be allowed or exercised in the appointment of regency or the election of professors, teachers or officers or in the admission of students. The board has power to remove president or any professor, instructor or officer when they think the interests of the University require it. The board may prescribe rules for management for libraries, cabinet, museums, laboratories, and its departments, with penalty of forfeiture of violation, which may be sued for in name of board.

They shall employ a preceptress for Ladies' Hall, who shall have charge and general supervision thereof, at a salary of not more than \$1,500 per year, provided said preceptress shall perform such other duties as the board may require.

(Section is derived from sec. 7, ch. 114, 1866; sec. 10, ch. 21, R. S., 158; sec. 2, ch. 229, 1876; last sentence is from secs. 389a, 389b of Ann. Stats.)

Wis. Stats., sec. 381, p. 331.

Use of income—Addition of other colleges.

The board is authorized to expend such portion of the income of the University fund as they deem expedient for erection of buildings, purchase of apparatus, library, cabinets and additions thereto.

They may receive, in connection with the University, any colleges upon application of its board and trustees, and such college so received shall become a branch of the University.

(This section is derived from secs. 33, 16, ch. 10, R. S., 1858.)

Wis. Stats., sec. 382, p. 321.

Reports and printing.

At the close of each biennial fiscal term the regents, through their president, shall make a report in detail to the Governor and the legislature exhibiting the progress, condition, and wants of each of the colleges embraced in the University, the course of study in each, the number of instructors and students, the amount of receipts and disbursements, together with the nature, cost and results of all important investigations and experiments and such other information as they may deem important, one copy of which shall be transmitted free by the Secretary of State to all colleges endowed under the provisions of the act of Congress entitled, "An act donating land to the several states and territories which provide colleges for the benefit of agriculture and the mechanic arts," approved July 2, 1862, and also one copy to the Secretary of the Interior, as provided in said act. The board shall also report to the Governor, as often as may seem desirable, the more important results of investigations conducted by the director of Washburn Observatory and by other investigators connected with the University, and also the results of such experiments therein relating to agriculture or the mechanic arts as said board may deem to be of special value to the agricultural and mechanical interests of the state. With the approval of the Governor such number of copies as he shall direct, and of the Washburn Observatory reports, not more than 700 copies may be printed by the State Printer in separate form on good paper and with such appropriate quality of binding as the Commissioners of Public Printing shall order; 800 copies of each of said reports, when so directed by the Governor, except those of Washburn Observatory, shall be delivered to the legislature and the remainder be used in exchange for the publications of other institutions and for such other public purposes as the regents may order.

Wis. Stats., sec. 383, p. 331.

The regents shall make and deliver to the Governor in tabular form a complete, concise and detailed report of the expenses of conducting the University for each year of the fiscal term ending the first Monday in January of each odd-numbered year preceding the date of such report. The report also shall include detailed statements or reports of receipts of conducting the University for the two preceding fiscal terms.

Ch. 97, L. 1901.

Accounts, how made, etc.

No claim or account against the Board of Regents of the University shall be paid unless it state the nature and particulars of the services rendered or materials furnished and be verified by the affidavit of the claimant or his agent and approved by an indorsement in writing thereon by the officer, member or committee of said board authorized thereby to certify claims and accounts for payments.

(This section was derived from part of ch. 296, 1895.)

This provision is affected by ch. 433, L. 1901.

Wis. Stats., sec. 383a, p. 332.

The president's powers.—Faculties.

The president of the University has authority, subject to the regents, to give general direction to the instruction and investigation of the several colleges, and so long as the interests of the institution require it. He shall be charged with the duty of one of the professorships. The government of the several colleges shall be intrusted to their respective faculties, but the regents have power to regulate their instruction and books or works to be used; also to confer degrees and grant diplomas and confer the power to expel students.

(This section derived from sec. 10, ch. 114, 1866; sec. 1, ch. 13, 1869; sec. 11, ch. 114, 1866.)

Wis. Stats., sec. 384, p. 332.

Relates to diplomas granted by the University which shall have the effect of legal license to teach in public schools when countersigned by the State Superintendent.

Wis. Stats., sec. 458h, amended by ch. 171, L. 1901.

Object and departments.

The object of the University shall be to provide the means of acquiring various branches of learning and shall consist of the following colleges and departments:

1. The College of Letters and Science.
2. The College of Mechanics and Engineering.
3. The College of Agriculture.
4. The College of Law.
5. Such other colleges, schools and departments as may be added thereto or added therewith.

(This section was derived from sec. 1, ch. 21, R. S. 1858; ch. 114, 1866; ch. 87, 1869; sec. 385, Ann. Stats.)

Wis. Stats., sec. 385, p. 332.

Departments, what embraced in.

Details of instruction for the various departments and colleges outlined in this section.

Wis. Stats., sec. 386, p. 333.

Open to both sexes—Military instruction—Diplomas may be countersigned.

The university shall be open to both sexes. All able-bodied male students in a college may receive instruction in military tactics, the requisite arms being furnished by the state. Diploma of a graduate, having been countersigned by the State Superintendent, has the effect of a limited state certificate, subject to the exercise of the power vested in the State Superintendent to revoke the right given by his signature to such diploma.

Wis. Stats., sec. 387, p. 333.

Tuition.

No student who has been a resident of the state for one year next preceding his admission shall be required to pay tuition fees, except in the law department and for extra studies. Regents may prescribe tuition for pupils in the law department and for those who shall not have been a resident as aforesaid and for extra studies.

(This section is derived from section 5, 8, 8, chapter 114, 1866; Chapter 63, 1873.)

Wis. Stats., sec. 388, p. 333.

Funds for support of—Gifts, bequests, etc.

For the support and endowment of the University there is annually and permanently appropriated:

1. The University Fund income and all other sums of money appropriated by law to such fund.
2. The Agricultural College Fund income.

3. All contributions derived from public bounty. The entire income of these funds to be at the disposal of the Board of Regents. Funds to be transferred to the treasurer of the board (who is also the State Treasurer) and to be separate and distinct from the accounts of the state.

(This section is derived from section 3, chapter 114, 1866; 2, chapter 80, 1870; 30, chapter 18, 1883; chapter 198, 1891; 389a, 389b, Annotated Statutes are in section 381.)

Wis. Stats., sec. 389, p. 334.

Tax for and appropriation of part-loans.

As amended by chapter 170, '99, there shall be levied and collected annually a tax of \$289,000 which is annually appropriated to the University Fund income to be used as herein provided. Out of which amount however \$40,000, annually is to be applied to the use of the College of Agriculture and \$22,500, annually, to uses of the College of Mechanics and Engineering; \$3,500.00 to new School of Commerce; \$2,000 to summer school authorized by section 392a, and \$1,000 for the purchase of law-books and \$13,000 for establishing courses in railway and electrical engineering.

Loans may be made to the University Fund income by the Commissioners of Public Lands. This section provides how loans shall be repaid. (Section is derived from sections 1, 3, chapter 117, 1876; chapter, 300, 1883; chapter 29, 1891; sections 2, 3, chapter 241, 1895; 1, 2, chapter 284, 1897; section 386a, Annotated Statutes.)

Wis. Stats., sec. 290, p. 355, amended by ch. 170, L. 1899, amended by ch. 322, L. 1901.

The Commissioners of Public Lands are authorized by this act to direct the loan of \$75,000 from the trust fund to be repaid to the trust fund as herein provided.

Ch. 322, L. 1901.

There is appropriated for the new engineering building \$150,000 and for the new agricultural building \$30,000 provided that the plans for the construction of any building provided for by this act shall be submitted to the Governor who shall satisfy himself by a personal examination that such building can be erected and completed by the money hereby appropriated.

Ch. 322, L. 1901.

The observatory.

The sum of \$3,000 shall be set apart annually from the receipts of the tax first mentioned in the preceding section for the maintenance of the astronomical observatory on the University

grounds, to be expended by the regents in astronomical work and instruction. And a like sum is annually appropriated out of the general fund to the Board of Regents for the purpose of enabling said board to employ and maintain a director of the Washburn Observatory.

(This section is derived from sec. 4, ch. 117, 1876; sec. 391a, Ann. Stats.; secs. 391b, 391c and 391d, Ann. Stats., are in sec. 392a.)

Wis. Stats., sec. 391 p. 335.

Regents' expenses.

The regents shall each receive the actual amount of his expenses in traveling to and from and in attendance upon all meetings of the board or incurred in the performance of any duty in pursuance of any direction of the board; accounts for such expenses, duly authenticated, shall be audited by the board and be paid on their order by the treasurer out of the University fund income. No regent shall receive any pay, mileage or per diem except as above prescribed.

(This section was derived from sec. 1, ch. 107, 1866.)

Wis. Stats., sec. 392, p. 335.

Summer school.

The Board of Regents may maintain the summer school of science, literature, language and pedagogy heretofore established in connection with the University; provided, that all teachers shall be designated by the State Superintendent and the president of the University.

Wis. Stats., sec. 392a, p. 335.

It was the opinion of the committee of revision, 1898, that the appropriation of \$2,000 for the summer school made by sec. 390 was intended to take the place of the \$1,000 appropriation contained in sec. 391b, Ann. Stats.

Note to sec. 392a.

Institutes, instruction at; fund for.

The regents may hold institutes for the instruction of citizens of Wisconsin in agriculture as herein provided, making such rules as they may deem necessary. They may employ agents to perform such work as they may direct. There shall not be used in any one year more than \$12,000 in paying the expenses of, and such as are incident to, such institutes, which sum shall be paid from the general fund. (Section was derived from sec. 1494c, Ann. Stats.)

Wis. Stats., sec. 1494b, p. 1105.

The Governor may authorize the Dairy and Food Commissioner or his assistants, when not engaged in the performance of other official duties, to give such aid to the farmers' institutes, dairy and farmers' conventions, and the agricultural department of the state University as may be deemed advisable.

W.s. Stats., sec. 1410d, p. 1060.

Commercial fertilizers, labels on; samples; analysis; fee; license.

This section emphasizes the duty of the director of the experimental station of the university in connection with making analysis of samples of fertilizers offered for sale for \$10 per ton.

Provision is made for certain fees to be charged by said director, which "shall be paid into the treasury of such station." (This section is derived from secs. 1, 2, 3, 4, 5, of Ch. 87, '95.)

Wis. Stats., sec. 1494c, p. 1106; sec. 1494d, p. 1106.

Samples, how sealed; publication of result of analysis.

Further provides as to the duty of said director of said station in connection with fertilizers; samples, how sealed; publication of analysis.

Wis. Stats., sec. 1494e, sec. 1107.

Nursery stock diseases.

Provides that it shall be the duty of the director of the agricultural experiment station to enforce this act to prevent diseases to the nursery stock. Nursery shipping companies shall report to said directors, who may demand lists of sales.

Provision is made for certain official labels and tags.

The agent of the director may receive not over \$3 per day for time actually and necessarily expended. The said director shall receive no compensation for carrying out the provisions of this act and he shall make a report to the Secretary of State in the last week of May of each year, and shall turn over all moneys received by him to the State Treasurer to be credited to the general fund.

All expenses to be approved by the director of said station and audited by the Secretary of State, who shall draw his warrant for the same upon the State Treasurer, who shall pay the same out of the general fund, and for this purpose the sum of \$300 or as much thereof as may be necessary is appropriated.

Ch. 180, L. 1899, pp. 263-266.

By this act there was appropriated \$35,000 from general fund to the University fund income for increase in dairy herd and enlargement of dairy building, with changes in heating apparatus; \$100,000 for new building for College of Engineering; \$16,000 for water tower; all to be expended in accordance with the judgment of the Board of Regents, provided, however, that no plan or plans shall be adopted, and no contract shall be entered into by the Board of Regents of the University for the construction or erection of any building or structure or thing, specified in this act, until such plans and contracts, with estimates of the total costs thereof, shall first have been submitted to and in writing approved by the Governor of the state, who shall withhold such approval until he shall satisfy himself by a personal examination of the same, and by such other means as he in his discretion may adopt, that any such building, structure or thing can and will be erected and fully completed according to such plans or contracts, for a sum of money not exceeding the amount hereby appropriated for such particular purpose.

Ch. 239, L. 1899, pp. 397, 398.

The regents may appoint three of the nine committees of the new library building.

Ch. 298, L. 1895; ch. 296, L. 1899.

State sealer and seal.

The custody of the public standards of weights and measures is given to the department of engineering of the University, subject to the control of the board of regents thereof, and the professor of engineering shall be the state sealer of weights and measures.

Wis. Stats., sec. 1659, p. 1196.

Printing.

The report of the regents of the U. W. shall be limited to 50 pages, and 1,000 copies shall be printed.

Wis. Stats., sec. 325b, p. 314.

DISBURSEMENTS OF THE BOARD OF REGENTS OF THE UNIVERSITY OF WISCONSIN

For the year ending Sept. 30, 1900.

Salaries	\$237,770 08
Apparatus	11,762 92
Furniture	2,601 69
Heat, light and water	23,871 78
Library	7,149 34
Repairs, insurance, etc.	11,979 77
Postage, printing, advertising, freight and express	13,810 69
Institute workers	5,755 00
President's contingent and office expenses	3,256 46
Expenses of Regents	787 79
Expenses of visitors	505 40
Contingent clerk and office expense	7,450 34
Live stock, seeds, tools, feed and farm expense	31,461 96
Labor	10,438 63
Armory, traveling and incidental expenses	2,887 34
Janitors	11,118 07
Miscellaneous	210,210 20
Total, per Regents' report	\$592,797 46
Illustrating and printing furnished by the state, including cost of paper and waste (see pages 192 and 488 in the report of the Secretary of State for 1900)	6,022 11
Total disbursements	\$598,819 57

Note.—The total receipts of the Regents of the University for same period, including \$79,000 borrowed, are shown to be \$680,476 97, the difference being accounted for by the balance on Regents' hands at the beginning and at the end of the fiscal year.

PREVENTION OF SAN JOSE SCALE AND OTHER NURSERY DISEASES.

Disbursements during year ending Sept. 30, 1900.

Merchandise	\$27 03
Per diem and expense of three persons	267 16
Total	\$294 19

(This item is inserted because the work is in charge of the Director of the Agricultural Experiment Station of the University, though not an expense chargeable to the University.)

NORMAL SCHOOLS.

BOARD OF REGENTS.

Prior to 1897 the Secretary of State as State Auditor signed all warrants upon the treasury for payments of money on account of Normal Schools, but chapter 98 of that year by amendment provided that this power shall be vested in the Secretary of the Regents. From that time until the present the Secretary of State as State Auditor has transferred money in lump sums to the exclusive control of the Regents who have kept their own accounts and disbursed all money without supervision of the Auditor.

As shown the Regents' accounts and statements are kept with reference to a different fiscal year from that established by law for all departments and institutions, making it impossible readily and definitely to harmonize the current accounts of the Board with those of the Auditor.

Chapter 433 of the laws of 1901 provides that the receipts and expenses of the Normal Schools and the Regents thereof shall be embraced in the centralized accounting system provided to be established by the Governor. The system provides that all receipts of money at the schools or by any officer or employe thereof or the Regents or employes thereof will be paid into the treasury. The Secretary of State as Auditor will sign all warrants for the payment of money from the treasury.

NORMAL SCHOOLS.

Residue of school fund.

"The residue of the 'school fund,' as provided in section 2, Art. 10, of the constitution, shall be appropriated to the support and maintenance of academies, normal schools and suitable libraries and apparatus therefor."

Const., art. 10, sec. 2, p. 119.

Normal school and drainage funds.

All swamp-lands and moneys in lieu thereof received from the United States and all moneys received as purchase-money for swamp-lands, including loans and investments of moneys due upon certificates of sale of swamp-lands, shall constitute two separate funds which are respectively denominated the normal school fund and the drainage fund.

Division of swamp-land and funds based upon Ch. 437, L. 1865, Ch. 151, L. 1869, and also sec. 251.

Wis. Stats., sec. 250, p. 288.

Swamp-land funds.

The proceeds of the sale of the lands conveyed to this state by the United States shall be paid one-half into the drainage fund and the balance into the normal school fund.

Wis. Stats., sec. 251a, p. 288.

Normal school fund income.

The normal school fund income shall, under the direction and management of the Board of Regents, be applied and is hereby appropriated to the establishment and support of the state normal schools and the purposes directed in this chapter. See section 250, page 288. (This section was derived from part of sec. 5, ch. 151, 1869; sec. 1, ch. 29, 1870; and part of sec. 3, ch. 151, 1869.)

Wis. Stats., sec. 409, p. 341.

Board of Regents, terms and vacancies.

The State Superintendent as ex-officio regent and ten regents appointed by the Governor, one of whom shall be a woman, shall constitute a board called the "Board of Normal School Regents." The term of office shall be three years, commencing with the first Monday of February in the year appointed, and qualification of respective members. No more than one male member shall reside in any one congressional district and they shall be divided into five classes so that the term of office of two regents shall expire each year.

(This section was derived from sec. 24, ch. 151; sec. 2, ch. 29, 1870; sec. 1, ch. 17, 1876.)

Wis. Stats., sec. 293, p. 336, amended by ch. 79, L. 1899, ch. 260, L. 1899, and ch. 166, L. 1901.

Powers of Regents.

The Board of Regents shall possess all powers necessary or convenient to accomplish the objects and perform the duties prescribed by law.

They shall not borrow money or contract indebtedness except as herein provided. The entire income of the normal school fund shall be at the disposal of the Board of Regents to transfer to the Treasurer of the state, and shall be distinct and independent from the accounts of the state.

(This section was derived from sec. 1, ch. 116, 1866; sec. 26, ch. 151, 1869; ch. 227, 1878.)

Wis. Stats., sec. 394, p. 336.

Provided that the Secretary of State should draw warrants for accounts allowed. Ch. 98, L. 1879, does away with the supervision of disbursements by the Secretary of State and allowing the secretary of the Board to sign warrants. By the unified accounting system adopted by the laws of 1901, the Secretary of State as auditor must sign all warrants.

Ch. 116, L. 1866, secs. 3, 5; ch. 5, L. 1875, sec. 1; ch. 151, L. 1869, sec. 27.

Officers of Board.

The officers of the Board shall be a president, vice president, and a secretary, and their terms of office shall be one year. The State Treasurer shall be ex-officio treasurer of the Board, but the Board may appoint suitable persons to receive any tuition fees or other moneys that may be due from any student or other person, *to disburse any part thereof and pay the balance to the treasurer.*

(This section was derived from sec. 24, ch. 151, 1869; sec. 2, ch. 29, 1870; sec. 1, ch. 13, 1876.)

Wis. Stats., sec. 395, p. 337.

The words in italics were added by the revisors in 1898, but the accounting system provided by Ch. 433, L. 1901, makes such payments illegal.

Ch. 433, L. 1901.

Meetings; quorum.

The Board of Regents of the normal schools shall hold an annual meeting at the capitol on the second Wednesday in July in each year. Special meetings may be called by the Governor.

Wis. Stats., sec. 396, p. 337.

Removal of Regents; disqualification of officers.

Any Regent may be removed from office for cause upon reasonable notice by a vote of two-thirds of all the regents.

Conditions upon which Regent may be expelled.

Wis. Stats., sec. 397, p. 337.

Model schools.

The Board of Regents shall establish a model school or schools for practice in connection with each state normal school, and shall make all the regulations necessary to govern and support the same.

Wis. Stats., sec. 403, p. 338.

Powers of Board as to schools.

The Board shall have the government and control of all of the normal schools and shall have power therefor.

Wis. Stats., sec. 404, p. 339.

Compensation of Regents.

Compensation may be allowed to any member of the Board for any specific service rendered under the direction of the Board, and such compensation shall be paid out of the normal school fund income into the state treasury on accounts presented to and adjusted by the Board and certificate signed by the secretary and president thereof.

(This section was derived from part of sec. 3, ch. 116, 1866; sec. 27, ch. 151, 1869; sec. 1, ch. 5, 1875.) (See ch. 433, L. 1901, providing for auditing by Secretary of State.)

Wis. Stats., sec. 398, p. 337.

Other normal schools; alteration, etc., of buildings.

The Board of Regents may establish other state normal schools and when, in their opinion, the educational interests may require it, they may erect buildings and enlarge, alter or repair any normal school building.

The *Secretary of State* shall draw a warrant for the expenses incurred for the same and it shall be paid from the normal school fund income.

(This section was derived from sec. 15, ch. 94, 1859; sec. 4, ch. 116, 1866; sec. 28, ch. 151, 1869; sec. 5, ch. 116, 1866; sec. 29, ch. 151, 1869; sec. 1, ch. 5, 1875.)

Wis. Stats., sec. 399, p. 337.

Donations, collection and application of.

The Board shall demand and receive sums of money donated and subscribed to aid in the erection of the necessary building for the normal schools, and shall apply the same to the erection and completion of said building and other expenses incurred by the said Board, and if any surplus shall remain they shall apply the same to the expenses of conducting said schools. Any deficit which may arise in the erection and completion of said buildings, shall be paid out of the normal school fund income.

(This section was derived from part of sec. 27, ch. 151, 1869; sec. 1, ch. 5, 1875; ch. 19, 1897.)

Wis. Stats., sec. 400, p. 338.

Accounts, etc.

All claims and accounts shall be verified by the oath, affidavit or affirmation of the claimant or his agent, in writing, and shall be certified in writing thereon by the officer or member of said Board before payment.

(This section was derived from part of sec. 27, ch. 151, 1869; sec. 1, ch. 5, 1875; ch. 98, 1879.)

By the centralized accounting system provided by ch. 433, L. 1901, the Secretary of State now audits all bills and signs all warrants.

Wis. Stats., sec. 401, p. 328, ch. 296, L. 1896.

Board of visitors.

There shall be appointed by the State Superintendent three suitable persons, not members of the Board of Regents, who shall examine thoroughly into the condition, organization and management of the normal schools. Such visitors shall be appointed annually.

(This section was derived from sec. 34, ch. 151, 1869, and sec. 4066, Ann. Stats.)

Wis. Stats., sec. 406, p. 340.

Appropriation for and loans to normal school fund income.

There shall be levied and collected annually a state tax of \$215,000, which amount is hereby annually appropriated to the normal school fund income.

Commissioners of public lands may loan to Board such part of the normal school fund as they deem prudent, not to exceed \$60,000. Such loan shall be repaid from the fund of the normal school and from any appropriation made to the support as herein provided.

(This original section was derived from sec. 406a, Ann. Stats., sec. 2, ch. 91, 1895; ch. 53, 1897.)

Wis. Stats., sec. 406a, p. 340, amended by ch. 370, L. 1901.

Appropriation for building, etc.

This act appropriates \$25,000 out of the general fund to the normal school fund to be expended for the repairs and heating apparatus.

Ch. 154, L. 1901.

Teachers' institutes; appropriation for.

The Board may use as it may deem necessary \$14,000, of which not exceeding \$7,000 shall be paid from the normal school fund income and not exceeding \$7,000 from the general fund, for the purpose of providing public lectures in connection with such institutes by the professor of the theory and art of teaching.

Secretary of State shall draw his warrant for that amount expended for the purpose mentioned in this section upon presentation to him of the certificate of the president and secretary of Board.

(This original section was derived from sec. 40, ch. 151, 1859; sec. 4, ch. 18, 1871; ch. 462, 1891; sec. 408a, Ann. Stats.)

Wis. Stats., sec. 408, p. 340, amended by ch. 371, L. 1901.

Institute instructors.

No money shall be paid for services rendered as an instructor in any institute to any person unless he holds a certificate signed by the State Superintendent certifying that the committee approves of said person as a competent institute instructor.

Wis. Stats., sec. 4611, p. 372.

Regents' report.

The president of the Board shall make a biennial report to the Governor on Aug. 31 of the year in which biennial fiscal term closes.

(This section was derived from sec. 35, ch. 51, 1869.)

Wis. Stats., sec. 410, p. 341.

Printing.

The report of the Regents of the Normal Schools shall be limited to 50 pages, and 1,000 copies shall be printed.

Wis. Stats. sec, 335a, p. 314.

During the year ending September 30, 1900, \$339,689.69 was transferred from the state treasury to the Board of Regents of the Normal Schools and \$1,340.00 was paid Institute Conductors as per report of the Secretary of State for that year. (Pages 193-224.)

- The classified disbursements by this Board have not been reported for this same period as the accounts kept and statements rendered by the Board cover the year ending July 3, 1900, instead of September 30.

For the school year ending July 3d, the disbursements reported by the Board were as follows:

Apparatus and cabinet	\$2,132 64
Building	9,999 12
Fuel	13,703 04
Furniture	2,481 11
Light	1,164 63
Miscellaneous	7,446 27
Printing	1,792 61
Reference books	3,789 53
Repairs	14,079 53
Salaries	207,655 25
Stationery	2,645 69
Text books	5,569 93
Water rent	1,647 28
Administration, etc..	19,523 37

Total disbursements for the year ending July 3, 1900..... \$293,630 45

Chapter 433 of the laws of 1901 provides (see *ante*, page 368) for a centralized accounting system which when established by the Governor will embrace the receipts and disbursements of the Normal School Regents and show from day to day the exact financial condition of each fund of each Normal School in a manner free from doubt or misconception.

The state aids the following associations which, however, are not included with the state departments and societies whose disbursements are to be audited by the Secretary of State. The legislative intent seems to have been to assist but not to control such organizations: Firemen's associations, Cheesemakers' association, Cranberry Growers' association.

STATE FIREMEN'S ASSOCIATIONS.

Appropriations.

There is hereby appropriated to the Wisconsin state firemen's association the sum of \$750 out of any money in the state treasury not otherwise appropriated. This appropriation is for the years 1901 and 1902, and said sum so appropriated shall be paid to said association in two equal payments to be made on or before the first day of June in each of said years.

Ch. 279, L. 1901.

This act appropriates \$250 annually for the years 1901 and 1902 to the Eastern Wisconsin Firemen's Association as herein provided.

Ch. 242, L. 1901.

DISBURSEMENTS ON ACCOUNT OF STATE FIREMEN'S ASSOCIATION

For the year ending Sept. 30, 1900.

Appropriation to treasurer of association	\$500 00
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Page 197 in the report of the Secretary of State for the year ending Sept. 30, 1900.

WISCONSIN CHEESEMAKERS' ASSOCIATION.

There is hereby appropriated to the Wisconsin Cheesemakers' Association annually out of any money in the treasury, not otherwise appropriated, the sum of \$400.

Ch. 259, sec. 1, p. 429, L. 1899.

Printing of report.

Four thousand copies of the report of this Association shall be printed, 1,000 to be bound in cloth, the remainder in pamphlet form, provided that the whole number of printed pages shall not exceed 200, and the same shall be distributed by the officers of the Association.

Ch. 314, sec. 1, p. 580.

DISBURSEMENTS ON ACCOUNT OF THE WISCONSIN CHEESEMAKERS' ASSOCIATION

For the year ending Sept. 30, 1900.

Appropriation to the treasurer of the association	\$400 00
Printing, including cost of paper and waste, per report Commissioners Printing	468 52
Total	\$868 52

Pages 197 and 488 in the report of the Secretary of State for the year ending Sept. 30, 1900.

WISCONSIN CRANBERRY GROWERS' ASSOCIATION.

State aid to; meetings; report, etc.

There shall be paid annually out of the state treasury to the proper officer of the Wisconsin Cranberry Growers' Association \$250, which shall be used exclusively for the purposes of obtaining and publishing information relative to the cultivation and production of cranberries.

The society shall hold semi-annual meetings in August and January at such places as it shall determine. The secretary thereof shall report to the Governor immediately after each January meeting an itemized and verified account of all disbursements made during the previous year, and shall then publish in pamphlet form, not to exceed 250 copies of 50 pages each, of the transactions of the Association and a summary of the information collected during the previous year relating to the cultivation and production of cranberries, which pamphlets he shall cause to be distributed among the growers of cranberries.

Wis. Stats., sec. 1479a, p. 1096.

DISBURSEMENTS ON ACCOUNT OF THE WISCONSIN CRANBERRY GROWERS' ASSOCIATION

For the year ending Sept. 30, 1900.

Appropriation to treasurer of association	\$250 00
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Page 197 in the report of the Secretary of State for the year ending Sept. 30, 1900.

STATE DAIRYMEN'S ASSOCIATION.

This association in its relation to the state is similar to that of the State Horticultural Society (see page 614), the amount of the annual appropriation, \$2,000, being paid over to the association, an audit of final disbursements not being required.

Eight thousand copies of the biennial report of the transactions of the association, including the report of the Treasurer, are printed and distributed at the expense of the state.

STATE DAIRYMEN'S ASSOCIATION.

Appropriation to Dairymen's Association.

- There is hereby annually appropriated out of any money in the treasury not otherwise appropriated the sum of \$4,000 to the Wisconsin State Dairymen's Association, provided that \$1,000 be given for the South Wisconsin Cheesemakers' Association.

Wis. Stats., sec. 1459b, p. 1089, amended by ch. 421, L. 1901.

Printing.

There shall be printed annually 8,000 copies of the transactions of this Association, provided that the whole number of printed pages shall not exceed 200.

Wis. Stats., sec. 335e, p. 315.

DISBURSEMENTS TO WISCONSIN DAIRYMEN'S ASSOCIATION

For the year ending Sept. 30, 1900.

Appropriation	\$1,000 00
Printing, including cost of paper and waste, per report Commissioners Printing	1,520 43
Total	\$2,520 43

Pages 197 and 488 in the report of the Secretary of State for the year ending Sept. 30, 1900.

STATE HORTICULTURAL SOCIETY.

The state aids this society, which is created to promote the horticultural interests by an annual appropriation of \$1,750 which is transferred to the exclusive control of the society with the limitation only that \$250 shall be for maintaining experiment stations.

The finances of this organization are not regarded as under the control of the state in a general sense but its Secretary is required by law to make a report to the Governor in October of each even-numbered year and include therein an itemized account of expenditures since the last report of the proceedings of the society.

This report, to the number of 7,000 copies (4,000 in cloth and 3,000 in paper), is printed and distributed at the expense of the state.

STATE HORTICULTURAL SOCIETY.

Purposes of; appropriation.

This Society is a body corporate, with the general powers and privileges of a corporation so far as applicable. It shall be the duty of the Society to aid in the formation and maintenance of county and local horticultural societies, to promote the horticultural interests of the state by holding meetings for discussion thereof, by the collection and dissemination of information in regard to the cultivation of fruits, flowers, trees, adapted to the soil and climate of this state, and in other proper ways to advance the fruit and tree growing interests thereof; and for such purposes only it may take, hold and convey real and personal property, the former not exceeding \$5,000. For the purpose of aiding in the accomplishment of such objects the Society shall be entitled to receive \$2,250 annually from the state treasury, \$250 of which shall be for the maintenance of experiment stations.

Wis. Stats., sec. 1459, p. 1089, amended by ch. 320, L. 1901.

Executive committee; secretary's report.

The officers shall be a president, secretary and treasurer. The said officers and one member from each congressional district in the state shall constitute the executive committee. The executive committee may fix the time and place for holding the annual meeting of the society, if the last meeting thereof failed to do so, and may call such meeting by giving at least 30 days' notice to each member. Said committee may also fill all vacancies in the society. The secretary of the society shall make, in October of each even-numbered year, a report to the Governor of the transactions thereof including an itemized account of all moneys expended since the last report was made.

Wis. Stats., sec. 1459a, p. 1669.

Printing.

There shall be printed annually upon the approval of the Commissioners of Public Printing 7,000 copies of the transactions of the said society; 4,000 to be bound in cloth; provided that the whole number of pages shall not exceed 250.

Wis. Stats., sec. 335e, p. 315, amended by ch. 329, L. 1901.

DISBURSEMENTS FOR WISCONSIN HORTICULTURAL SOCIETY

For the year ending Sept. 30, 1900.

State appropriation to the treasurer of the society	\$1,750 00
Printing, including cost of paper and waste, per report Commissioners Printing	1,046 18
Total	\$2,796 18

Pages 197 and 488 in the report of the Secretary of State for the year ending Sept. 30, 1900.

STATE INSPECTOR OF APIARIES.

Appointment, duties and compensation.

The Governor may appoint for a term of two years a State inspector of apiaries. The Inspector shall, when notified of the existence of the disease known as foul brood among apiaries, examine all such as are reported and all others in the same locality and ascertain whether or not such disease exists, and if satisfied of its existence shall give the owner or person who has the care of such apiaries full instructions as to the manner of treating them. Within a reasonable time after such examination the Inspector shall make another examination thereof, and if the condition of any of them is such as in his judgment renders it necessary he may burn all the colonies of bees and all the comb necessary to prevent the spread of the disease.

He shall before such burning give the notice provided for in and otherwise proceed pursuant to the provisions of section 1492b. He shall at the close of each calendar year report to the Governor stating the number of apiaries visited, the number of those diseased and treated, the number of colonies of bees destroyed and of the expenses incurred.

He shall receive \$4 for each day actually and necessarily spent in the performance of his duties and be reimbursed the money expended by him in defraying his expenses provided that the total expenditure for such purposes shall not exceed \$500 per year.

Wis. Stats., sec. 1494f, p. 1107.

DISBURSEMENTS OF INSPECTOR OF APIARIES

For the year ending Sept. 30, 1900.

Per diem and expenses of Inspector	\$373 43
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Page 198 in the report of the Secretary of State for the year ending Sept. 30, 1900.

SUPERVISOR OF INSPECTORS OF ILLUMINATING OILS.

The provisions of the centralized accounting system provided to be established by chapter 433 of the laws of 1901 will apply to this officer and his deputies.

Appointment; salary.

The Governor shall appoint by and with the advice of the senate, a suitable person who shall not be pecuniarily interested, either directly or indirectly, as state supervisor of inspectors of illuminating oils, whose term of office shall be two years.

Wis. Stats., sec. 1421a, p. 1068.

The Governor may remove such person from office and fill any vacancy arising from such removal or other cause from the unexpired portion of the term.

His salary is \$1,500.00 annually.

Ch. 466, L. 1901.

Oath and bond.

The supervisor shall take the constitutional oath of office before entering upon his duties and execute a bond to the state of \$5,000 with such sureties as shall be approved by the Secretary of State and shall be filed in the office of the Secretary of State.

Wis. Stats., sec. 1421b, p. 1068.

His duties; deputies.

He shall devote all his time to duties of his office and under the direction of the Governor shall oversee all deputy inspectors, instruct them in the performance of their duties, keep a record of their reports to him and make a report to the Governor on the first of October of each year.

Wis. Stats., sec. 1421c, p. 1068, amended by ch. 466, L. 1901.

He shall make an additional report to the Governor before January 10, each odd-numbered year.

He shall make rules and regulations for their guidance not inconsistent with the provisions of this chapter.

He may appoint with the advice of the Governor such deputies as shall be necessary for the prompt and faithful performance of duties required under this chapter and define inspection districts with the assistance of the Governor.

Ch. 97, L. 1901.

Deputy's oath and bond; duties, salary.

Bonds of the deputies, fixed by the Supervisor and approved by the Governor, shall be filed in the office of the State Treasurer. Sureties to be approved by the County Judge.

On the first day of each month the Supervisor shall receive from the deputies a full statement of the number of barrels of oil inspected during the preceding month, the result of such inspection and an account of the actual receipts of his office and the deputy shall at the same time remit to the State Treasurer all fees he has received for inspecting oils. Said fees to be set aside by the Treasurer as a fund to be used for paying the salaries and expenses of Supervisor and deputies, which shall be paid when approved by the Governor.

Balance remaining in such fund expended at end of fiscal year to revert to general fund.

Deputies salaries shall not exceed \$100.00 per month, to be fixed by the Governor but salary and traveling expenses not to exceed 8 cents per barrel on oil inspected in his district during the month.

Wis. Stats., sec. 1421d, p. 1068, amended by ch. 466, L. 1901.

The provisions as to details inspection and standard of oil to be maintained should be obtained from a reference to the laws cited as they can not be condensed to the limits of this pamphlet.

Wis. Stats., secs. 1421c, 1421b, 1421g, 1421b, 1421i, 1421k, 1421 l, p. 1069, amended by ch. 466, L. 1901.

Deputy inspector to demand and receive 10 cents per every sample of oil tested.

Wis. Stats., sec. 1421j, p. 1071, amended by ch. 466, L. 1901.

Printing.

The report of the Supervisor of Inspectors of Illuminating Oils shall be limited to 25 pages and 800 copies shall be printed.

Wis. Stats., sec. 335b, p. 314.

Heretofore there has been no expense to the state in connection with this department, the fees having been paid by the dealers in oil.

STATE BOARD OF MANAGERS OF THE PAN-AMERICAN EXPOSITION AT BUFFALO.

Provides for a board of five citizens of Wisconsin.

Ch. 318, sec. 1, p. 585, L. 1899.

Members of, how appointed.

Members to be appointed by the Governor. They shall elect officers, make by-laws, etc., as herein provided.

Members may be removed and vacancies filled by the Governor.

Ch. 318, sec. 2, p. 586, L. 1899.

To have no compensation.

Members of board shall receive no compensation for their services, but their actual expenses for transportation and subsistence when they are necessarily absent from their homes, shall be paid from the moneys appropriated by this act.

Ch. 318, sec. 3, p. 586, L. 1899.

Treasurer of, to give bond.

The treasurer of the board shall, before he shall be entitled to receive the moneys hereby appropriated, execute and deliver to the Governor a bond in the sum of double the amount of the appropriation, with at least two sureties who shall justify their responsibility, which bond shall be approved by the Governor and conditioned for the faithful performance of the duties of said treasurer and the faithful accounting to the state of Wisconsin for all moneys which shall come into his hands.

Ch. 318, sec. 4, p. 586, L. 1899.

Moneys how expended.

Provides how the money shall be expended by the treasurer of said board.

Ch. 318, sec. 5, p. 586, L. 1899.

Report of Treasurer.

Provides for the report of the Treasurer and the closing up of the business.

The last two sections are affected by the unified accounting system provided by chapter 433, laws of 1901.

Ch. 318, sec. 6, p. 587, L. 1899.

Duties of board.

The duties of said board shall be to provide suitable building or buildings, to be erected upon such space as may be allotted to the state of Wisconsin for its use upon the ground of said exposition, and to the performance of such details relating to the representation of citizens of the state of Wisconsin in the exposition as may be from time to time necessary, and said board shall have charge and control of all buildings and other property of the state when erected, purchased or otherwise acquired or placed in its custody.

Ch. 318, sec. 7, p. 587, L. 1899.

Appropriation.

There is hereby appropriated out of any money in said treasury not otherwise appropriated, \$25,000, or so much thereof as may be necessary to carry out the provision of this act. The said board shall cause from time to time, estimates to be made of the expenses to the payment of which the money is to be applied, which estimate shall be signed by the President, by the Secretary of the Board and be filed with the Governor and if the Governor shall approve thereof, shall endorse his approval thereon and file the same with the Secretary of State, and thereupon the Secretary of State shall audit the same and draw his warrant upon the treasury of the state for the payment of the same, and such estimates shall not exceed in all the sum hereby appropriated to the treasurer of said board for the purpose of carrying out the provisions of this act. (The unified accounting plan adopted by chapter 433, laws of 1901, will modify the above section.

Ch. 318, sec. 8, p. 587, L. 1899.

Liability of members and state.

No member, whether an officer or otherwise shall be personally liable for any debt or obligation which may be created or incurred by said board, and nothing in this act shall be so construed as to create any liability of the state, direct or indirect, for any obligation incurred, nor for any claim for aid or for pecuniary assistance from this state, in support or liquidation of any debts or obligations created by said board in excess of the appropriation made by this act.

Ch. 318, sec. 9, p. 588, L. 1899.

DISBURSEMENTS IN PAN-AMERICAN EXPOSITION COMMISSION

For the year ending Sept. 30, 1900.

State appropriation \$3,000 00

Page 198 in the report of the Secretary of State for the year ending Sept. 30, 1900.

STATE BOARD OF COMMISSION FOR ST. LOUIS
WORLD'S FAIR, 1903.

The commissioners of such board shall be appointed by the Governor. Its first meeting shall be held at such time and place as the Governor shall appoint.

Provision is made for the usual officers, adoption of by-laws and regulations being necessary.

No compensation is provided but the actual expenses of members for transportation and subsistence when they are necessarily absent from their homes shall be paid out of the money appropriated.

The treasurer of the board shall receive the moneys hereby appropriated. He shall execute and deliver to the Governor a bond in double the sum of appropriation with sureties approved by the Governor. Money shall be paid out by the Treasurer only on the order of the President of the board countersigned by the Secretary, and showing the proper cause for which the same was paid out.

Accounts for traveling expenses and subsistence shall have attached thereto the affidavit of the claimant that such expenses have been actually incurred and the Treasurer shall from time to time make a report to the Governor of the expenditures of the board and the receipts at any time upon the written request of the Governor. The Secretary of State shall audit all receipts and expenditures within six months after the close of the World's Fair.

Ch. 297, L. 1901.

Sec. 7. This act outlines the duties of the commissioners in connection with providing a building or buildings for the state of Wisconsin upon the exposition grounds. \$25,000 is appropriated by this act to carry out its proposition.

Sec. 7, Ch. 297, L. 1901.

Sec. 9. Relates to the amount of appropriation herein made.

Sec. 9, Ch. 297, L. 1901.

Ch. 433, L. 1901, will modify the provisions of this act with respect to the auditing and accounting. See ante, p. 268.

BOUNTY ON WILD ANIMALS KILLED.

Section 1628, page 1182: This section directs the Secretary of State to audit claims made by counties in accordance with the provisions of law for refund of money paid in bounties.

The disbursements on this account during the year ending September 30, 1900, were \$9,786.00, per report of Secretary of State, page 198.

STATE BOARD OF AGRICULTURE.

While there has been some question in the past as to whether this Board was a state board in the strict sense whose disbursements must be audited by the Secretary of State, it is assumed that it is embraced within the provisions of chapter 433 of the laws of 1901 and that after the system therein adopted has been established, all expenditures must be, after itemized vouchers have been filed with and approved and warrant signed by the Secretary of State as Auditor.

Heretofore the State Auditor has transferred to the Treasurer of the Board the entire appropriation made by the legislature and has not audited the final disbursements.

STATE BOARD OF AGRICULTURE.

Appointment, terms, vacancies.

The department of agriculture as heretofore established is continued. Its objects shall be the promotion of the interests of agriculture, dairying, horticulture, manufactures and domestic arts. The department shall be managed by a board to consist of one member from each congressional district and two from the state at large to be appointed by the Governor for a term of three years from the first day of January in the year of their appointment. Not more than two-thirds of the members of the board shall be of the same political party.

Vacancies shall be filled by the Governor for the unexpired term only.

Wis. Stats., sec. 1456, p. 1087.

Members' expenses.

The members of said board shall serve without compensation, but shall be reimbursed out of any funds set apart for their use by the state or otherwise received by them the sums actually expended in the performance of their duties.

Wis. Stats., sec. 1457, p. 1087.

Annual meeting; officers.

The said board shall hold its annual meeting on the first Tuesday of March and at such meeting shall elect one of its members as President and one as Vice-President, and some person not a member as Secretary, who shall hold his office for one year unless sooner removed by the board. The State Treasurer shall be ex-officio treasurer of the board. Such officers shall perform such duties as usually pertain to such offices and such as the board may direct.

Wis. Stats., sec. 1468, p. 1067.

Rooms, fairs; by-laws; report.

The board may occupy such rooms in the capitol as may be assigned for that purpose by the Governor. They shall have sole control of the affairs of the department of agriculture and of all state fairs, and state ground fairs and may make such by-laws, rules and regulations in relation to the management of the business of such department and said fairs and the offering of premiums thereat as they shall from time to time determine. The board shall make a report of their action to the Governor on or before the first day of December in each year.

Wis. Stats., sec. 1458a, p. 1088; amended by Ch. 48, L. 1899.

Use of funds; liability of state.

Whatever money shall be appropriated or otherwise received by said board for the department of agriculture shall be paid to the State Treasurer and be disbursed by him on orders signed by the President and Secretary of the board for such purposes, as in the judgment of the board, will best promote the interests committed in their charge.

No officer, clerk or employee of said board shall have any claim upon the state for any salary or expenses, except such as may be allowed by the board and paid from any appropriation or funds under their control; and the board shall not in any manner whatever be liable for any debt or obligation incurred or contract made by said board.

Wis. Stats., sec. 1458b, p. 1088.

Appropriation.

The Secretary of State shall issue his warrant for the amount paid by the board for premiums at their last annual fair, on the presentation to him of the sworn statement of the Secretary of said board. On the presentation of such a statement, signed by the President and Secretary of the board, certifying that the sale of intoxicating liquors has been prohibited and prevented upon the fair grounds thereof during the last preceding fair, he shall annually draw his warrant for \$4,000.

Wis. Stats., sec. 1458c, p. 1088.

Postage.

The board may procure necessary postage stamps and stamped envelopes for their official correspondence.

Wis. Stats., sec. 169, p. 253.

Stationery.

The Superintendent of Public Property shall issue to the Secretary of the board the necessary stationery for the board.

Wis. Stats., sec. 290, p. 301.

Printing.

There shall be printed biennially 5,000 copies of the report of the board bound in cloth, provided the whole number printed shall not exceed 400 pages.

Wis. Stats., sec. 335e, p. 315; amended by Ch. 339, L. 1901.

The Secretary of the board is authorized to collect information as to crops as herein provided. Also condition of health and value of farm animals and all other information which he deems of practicable value to the interest of the state.

He shall report biennially, statements of which report shall be distributed to the farmers and others interested in the state.

The Commissioners of Public Printing shall in connection with the other printing of this board, supply the Secretary with necessary blanks for this work and cause to be published in pamphlet form the report provided that not more than 5,000 copies of any part are printed.

Ch. 79, L. 1901.

This act appropriates to the State Board of Agriculture \$25,000 without specifying for what purpose the money is to be expended but requiring the board to account to the Governor.

Ch. 355, L. 1901.

DISBURSEMENTS TO STATE BOARD OF AGRICULTURE

For the year ending Sept. 30, 1900.

Appropriation paid to the treasurer	\$4,000 00
Ten per cent. premiums paid to the treasurer.....	2,038 78
Printing, including cost of paper and waste, per report Commissioners of Printing	1,581 94
Postage and P. O. box rent	655 50
Expressage	194 34
Stationery, per report Superintendent Public Property	103 85
Total	\$8,574 41

Pages 204, 488 and 500 in the report of the Secretary of State for the year ending Sept. 30, 1900.

NORTHERN WISCONSIN STATE FAIR.

The Northern Wisconsin State Fair, the La Crosse Interstate Fair and county agricultural societies are aided by the state but are not state organizations and their disbursements are not regarded as under the control of the Auditor.

NORTHERN WISCONSIN STATE FAIR.

State aid to; conditions of.

Upon the presentation to him of the sworn statement of the President and Secretary of the Northern Wisconsin State Fair, heretofore established at Chippewa Falls, that said organization at its last annual fair or exhibition prohibited and excluded from its fair grounds and premises over which it had control all gambling and gambling devices, and that said organization had not authorized or allowed any spirituous, malt, ardent or intoxicating liquors or drinks to be sold on said grounds during the year, the Secretary of State shall draw his warrant in favor of the Treasurer of the society for \$3,250 and 10 per cent. of the amount of premiums actually paid by the said fair at its last preceding annual fair; in computing the amount on which such percentage is to be paid there shall not be included more than \$1,000 of premiums or prizes for trials or exhibitions of speed of all classes in any year; provided, that no other agricultural society in Chippewa county shall receive any money from the state.

Wis. Stats., sec. 1458d, p. 1088, amended by ch. 356, L. 1901.

DISBURSEMENTS TO NORTHERN WISCONSIN STATE FAIR

For the year ending Sept. 30, 1900.

Appropriation by ch. 212, L. 1897	\$2,500 00
Ten per cent. premiums paid to treasurer of society.....	313 41
Total	\$2,813 41

Page 204 in the report of the Secretary of State for the year ending Sept. 30, 1900.

COUNTY AGRICULTURAL SOCIETIES.

State aid to; conditions of.

There shall be paid within ten (10) days after February first out of the treasury to each organized agricultural society and industrial association, other than the Wisconsin state fair, 40 per cent. of the total amount of premiums paid thereby during the preceding year; provided, no society, which received from the state in 1888 \$200 and 10 per cent on the amount paid for premiums, shall receive less than \$200, that 40 per cent. shall not be paid on more than \$3,000 for premiums to one society or association and that in computing the amount on which it is to be paid there shall not be included more than \$1,000 of premiums paid on trials or exhibitions of speed of all classes in any one year:

1. Such society or association shall have held an annual fair or exhibition during the previous year.
2. There shall be presented to the Secretary of State a sworn statement of its President and Secretary that said society at its annual fair, had prohibited and excluded from its fair grounds and all adjacent lands under its authority all gambling devices whatsoever.
3. It shall have received into its treasury in cash during the preceding year not less than \$200 from the sale of membership, admission tickets, subscriptions and other sources than from the state.
4. It shall have published in some newspaper in the county a condensed statement of its principal acts and doings for the year, etc. Such report shall be verified by the oath of the Secretary and a certified copy thereof be deposited with the Secretary of State and one with the Secretary of the board of agriculture on or before February 1 of each year. All money shall be paid to the Treasurer of the society and only upon the receipt of the Treasurer of each countersigned by the Secretary thereof.

Wis. Stats., sec. 1463, p. 1691, amended by ch. 274, L. 1901.

DISBURSEMENTS TO COUNTY AGRICULTURAL SOCIETIES

For the year ending Sept. 30, 1900.

Paid to various societies and associations\$52,258 53

Page 204 in the report of the Secretary of State for the year ending Sept 30, 1900.

LA CROSSE INTER-STATE FAIR ASSOCIATION.

Upon presenting to the Secretary of State a sworn statement of the officers of this association that it prohibited and excluded from its fair grounds at the last exhibition all gambling whatsoever and that it did not authorize any intoxicants to be sold on the said fair grounds during the said fair, the Secretary of State shall during the first ten days of February draw his warrant for the Treasurer of the society for \$2,000 and 10 per cent. of amount of premiums paid at last preceding fair.

In computing the amount on which such percentage is to be paid only \$1,000 of prizes for speed exhibition shall be included. This aid is in lieu of what said association might otherwise be entitled to by law, provided that no money shall be paid under this act in any year in which an exhibition is not held.

Ch. 337, L. 1901.

THE COMMISSION OF THE INTER-STATE PARK OF THE DALLES OF THE ST. CROIX.

The Governor is authorized to appoint a commission of three persons to be known as the Commission of the Inter-state Park of the Dalles of the St. Croix.

Within ten days after their appointment they shall take oath and file with the Secretary of State and their terms shall be two years.

They shall organize and elect a chairman from their number.

They shall continue the work of acquiring title to lands as herein provided in an inter-state park.

They may make contract for the purchase and donations of lands as provided in section 5.

Each commissioner shall receive \$5 per day and actual expenses for time actually served not exceeding 20 days in any one year.

\$7,500.00 is hereby appropriated.

Ch. 305, L. 1901.

NOTE.—Chapter 102, laws of 1899 provides for the progress of work of acquiring lands for an Inter-state Park making an appropriation of \$6,500 therefor. See page 139 of the session laws of 1899.

BOARDS OF MEDICAL EXAMINERS, DENTAL EXAMINERS, AND PHARMACY.

These Boards are authorized by law to exist for the purposes named in the acts creating them but are not an expense to the state as all expenditures are made out of fees which the Boards are empowered to collect for making examinations, etc. While they are required to report to the Governor, the state does not seek to supervise their disbursements or otherwise control their business operations..

STATE BOARD OF MEDICAL EXAMINERS.

Appointment, terms, vacancies.

The Governor shall appoint a board of medical examiners consisting of seven (7) members to be known as the "Wisconsin Board of Medical Examiners." Such appointments shall be made from three separate lists containing ten names each presented every second year to him, one list by the Wisconsin State Medical Society, one by the Homeopathic Medical Society of the State of Wisconsin, and one by the Wisconsin State Eclectic Medical Society. In case any one of said societies fail to present such list of names, the Governor may fill the vacancies by the appointment of a sufficient number of reputable practitioners of medicine who shall be graduates of a recognized medical college and representative of the different schools of medicine as hereinafter provided. All appointments shall be made for four years and until their successors are appointed; and vacancies may be filled by appointments from the lists last filed previous to the occurrence thereof, preserving the proportion of the different schools of medicine as herein required. No person shall be appointed to serve more than two terms in succession and no member of any medical college shall be appointed on said board. Three of the appointees shall be allopathic, two homeopathic and two eclectic physicians.

Officers, meetings and records.

The board shall elect a President, Secretary and Treasurer who may administer oaths as herein provided.

This section further provides for regular and other meetings and how records and registers shall be kept.

Wis. Stats., sec. 1435a, p. 1075.

Examinations; fees.

Provisions for examinations and fees therefor.

Wis. Stats., sec. 1435b, p. 1075, amended by ch. 306, L. 1901.

Registration.

Physicians and surgeons to register with the board.

Ch. 87, sec. 1, p. 122, L. 1899.

Provision as to books of registration.

Ch. 87, sec. 1, p. 122, L. 1899.

When registration made and fee for same.

Registration when to be made.

Fee of \$2.00 to be paid by the applicant, then to issue certificate of registration. Said certificate to be filed with the county clerk.

Ch. 87, sec. 2, p. 122, L. 1899.

Disposition of fees received for filing.

All money received by the said board in payment of the registration fees herein required shall be kept by the treasurer thereof. Out of the funds so coming into their possession, the members of said board may receive all legitimate and necessary expenses, and for their services a sum to be determined by the board not exceeding \$5.00 each for each day actually spent in attending to the business of the board. The secretary of the board shall receive, in addition to his present salary, a compensation for the work herein required of him to be fixed by said board, not to exceed \$500, such compensations and expenses shall be paid from the fees received by the board and no part thereof shall be paid out of the state treasury.

It shall be the duty of the said board to make a report of the proceeding under this act to the Governor at the end of each biennial period, together with an account of all moneys received and disbursed by them.

Ch. 87, sec. 5, p. 124, L. 1899.

U. S. army and navy surgeons exempt.

Provides for exemptions of army and navy surgeons, etc.

Ch. 87, sec. 3, p. 123, L. 1899.

District attorneys and board to institute actions.

Provides how actions under this act are to be brought.

Ch. 87, sec. 7, p. 124, L. 1899.

STATE BOARD OF DENTAL EXAMINERS.

Appointment; terms; vacancies.

The State Board of Dental Examiners, as heretofore constituted, is hereby continued. It shall consist of five practicing dentists, at least three of whom shall be members of the Wisconsin State Dental Society.

The members of such board shall be appointed by the Governor for the term of five years and until their successors are appointed.

Vacancies shall be filled by the Governor for the unexpired portion of the term. It shall be the duty of said board to enforce the provisions of this chapter.

Wis. Stats., sec. 1410e, p. 1061.

Officers; meetings; record.

The officers of the board shall be a President and Secretary, who shall be chosen from the members thereof in such manner and for such terms as may be provided by the by-laws. At least one meeting of the board shall be held each year at such time and place as may be fixed; other meetings may be held when and where the board may determine. A majority of the members shall constitute a quorum. The Secretary's record of the proceedings of the board shall be open to public inspection at all reasonable times.

Wis. Stats., sec. 1410f, p. 1061.

Registration; list of persons registered.

Every person who was engaged in the practice of dentistry in this state on the 30th day of September, 1885, may continue such practice without incurring any of the liabilities imposed by this chapter by annually causing his name and residence or place of business to be registered by said board, who shall keep a book for that purpose.

Wis. Stats., sec. 1410g, p. 1061.

Examination; license.

Any person who may desire a license may appear before the Board of Dental Examiners at any regular meeting and be examined with reference to his knowledge and skill in dental surgery;

if such examination shall be satisfactory the board shall issue a license to practice dentistry; provided that the board shall license without examination, upon the payment of \$1, any regular graduate of an incorporated and reputable dental college which requires that candidates for graduation shall attend two full courses of lectures of five months each, the last of which courses shall be attended in the college which issued the diploma. All licenses shall be signed by a majority of the board and be attested by the President and Secretary. Every license shall be prima facie evidence of the right of the licensee to practice dentistry.

Wis. Stats., sec. 1410h, p. 1061.

Fees; expenses; report.

The board may charge each person applying or appearing for examination for license to practice dentistry a fee of \$10 and for each registration \$1. Out of the funds which may be so received the members of the board may be reimbursed their legitimate and necessary expenses incurred in attending their meetings and in discharging their duties.

The excess of receipts over the disbursements shall be held by the Secretary to meet future expenses of the members.

The board may require the Secretary to give a bond in such terms as they may direct.

An annual report of the proceedings of the board, containing an account of all moneys received and disbursed pursuant to this chapter, shall be made to the Governor on the 30th of September.

Wis. Stats., sec. 1410j, p. 1062.

STATE BOARD OF PHARMACY.

Appointments, members, terms, and vacancy.

The board as heretofore constituted, is continued and the rules, regulations and by-laws thereof, not inconsistent with this chapter shall continue in effect. Such board consists of five members, resident pharmacists; they shall be appointed for five years and until successors qualify.

The Wisconsin Pharmacy Association shall annually elect three pharmacists, who shall be certified to the Governor from which number or those previously certified, the Governor shall fill vacancies.

Wis. Stats., sec. 1495b, p. 1065.

Meetings; officers; prosecutions.

The board shall hold an annual meeting in March. Three members constitute a quorum. At such meeting a President, Secretary and Treasurer shall be elected for one year. The Secretary and Treasurer may or may not be members of the board. By-laws may be made by the board. Meetings shall be held at least once in three months for the examination of applicants and pharmacists and assistants and other business. Thirty day's public notice of meetings held for such examination shall be given.

Applicants who make application in accordance herewith, shall be examined, and if found competent shall be granted certificates. The board shall prosecute all persons violating this chapter, report annually to the Governor and Wisconsin Pharmacy Association and give therein a record of its proceedings, the receipts and disbursements and the names of all persons as pharmacists or assistants. The Secretary shall keep a record of board proceedings in a book in which he shall enter names and places of business of all persons. He shall receive salary fixed by board and the amount expended for traveling and other expenses on official duties and shall give such bond as the board may require.

The members shall receive \$5.00 for every day they are actually engaged and their actual expenses.

All disbursements of whatever nature or for whatever purpose shall be made from the fees received by the board. No part thereof shall be paid out of the state treasury. The Treasurer shall hold all moneys received in excess of the amount necessary to meet claims allowed as a fund from which to pay the expenses.

Wis. Stats., sec. 1409c, p. 1055.

Registration as pharmacist; registration as assistant.

Provides for registration and certificates for pharmacists and assistants.

Wis. Stats., sec. 1409d, p. 1056, amended by ch. 340, L. 1901; sec. 1409e, p. 1057.

Actions, prosecutions of.

Provides how actions for penalties, etc. shall be brought.

Wis. Stats., sec. 1409h, p. 1058.

No disbursements paid by the state.

FINANCIAL STATEMENT.

In exhibiting the classified receipts and disbursements of the state which follow, the fund accounts are not specified because those unfamiliar with the subject, reference to money being paid into or out of certain funds has proved to be confusing.

The entire net receipts and payments of money is therefore given after all transfers between funds have been eliminated.

RECEIPTS IN THE STATE OF WISCONSIN

For the year ending Sept. 30, 1900.

Available for maintaining the state government and state institutions.

Taxes:

A. Annual tax levied for free high schools, charitable, reformatory and penal institutions.....	\$489,223 94	
A. Sulf tax	5,130 00	
B. One-mill tax for common schools.....	625,000 00	
C. Special tax for University	288,000 00	
D. Special tax for normal schools	190,000 00	
	<u>\$1,577,353 94</u>	
E. Legacy tax	5,109 73	
		<u>\$1,582,463 67</u>

Licenses:

F. Railways	\$1,547,141 64	
F. Palace and sleeping car companies	16,900 31	
G. Freight line companies	1,150 99	
G. Express companies	7,247 01	
G. Telegraph companies	11,312 15	
H. Telephone companies	21,426 73	
K. Street railways and electric light companies.....	8,322 06	
K. Loan and trust companies	2,261 50	
K. Log driving and boom companies	1,292 72	
K. Plank road companies	524 85	
L. Insurance companies	336,947 62	
M. Hawkers' and peddlers' licenses	10,900 45	
N. Hunting licenses	30,259 56	
		<u>\$2,045,687 59</u>

Interest, not including certificates of indebtedness:

O. On school funds	\$82,458 13	
P. On University funds	8,197 54	
Q. On Agricultural College funds	8,197 54	
R. On normal schools fund	53,394 34	
		<u>\$147,921 10</u>

Sundry items:

S. Charitable, reformatory and penal institutions (contract work and sales)	\$83,812 76	
T. U. S., by Governor (Wis. Veterans' Home and refunds Spanish-American war)	31,676 26	
T. Notary fees	2,813 00	
T. Incorporation and office fees	31,183 65	
T. Insurance Commission fees	44,277 85	
T. Bank Examiner's fees	6,715 00	
T. Sales of books	4,248 50	
T. Land department, sales and fees	35,932 10	
	<u>\$240,659 12</u>	\$3,776,072 36
U. Tuition from normal schools	\$2,503 54	
V. Tuition, farm sales, etc., University	106,575 75	
V. U. S. appropriation for University and Agricul- tural College	40,050 00	
		<u>\$389,738 41</u>
W. Miscellaneous		12,658 92
Total		<u>\$4,178,469 69</u>

The pages in the report of the Secretary of State for the year 1900, from which these figures have been taken, are here given:

A—142, 143; B—210, 211; C—215, 216; D—221, 222; E—152; F—144; G—145; H—145, 146; K—147; L—148, 152; M—153; N—229, 230; O—211, 212; P—216, 217; Q—219; R—222, 223, 224; S—152; T—153; U—223; V—216; W—153, 154.

DISBURSEMENTS IN THE STATE OF WISCONSIN

For the year ending Sept. 30, 1900.

The classification of expenses and references to pages in the report of the Secretary of State will be found under each of the departments in previous pages.

Executive Department	\$15,781 51
Secretary of State and Auditor	39,522 75
Old Tax Commission of 1898	854 97
Treasury Department	18,778 24
Attorney General's Department	12,420 56
State Superintendent of Public Instruction	25,525 47
Railroad Commissioner Department	7,129 74
Insurance Commissioner Department	21,245 06
Tax Commissioners	16,820 38
A. Commissioners of Public Lands	20,950 87
Advertising lands	238 80
Bank Examiner's Department	12,278 15
Publishing bank reports	296 39
Bureau of Labor and Industrial Statistics	10,149 63
Factory Inspection Department	12,342 21
Dairy and Food Commissioner's Department	12,216 46
Board of Control	24,684 77
B. Reformatory, charitable and penal institutions	694,746 32
Maintaining chronic insane in county asylums	375,860 62
Industrial School for Girls at Milwaukee	13,000 00
Wisconsin Veterans' Home at Waupaca	93,989 40
State Board of Health	10,016 05
State Veterinarian and Veterinarian Sur'y	8,548 08
Commissioners of Fisheries	31,180 69
Fish and Game Warden	3,062 41
Treasury Agent	2,940 65
State Board of Arbitration and Conciliation	826 78

Supreme Court	39,307 55	
State Law Library	8,716 09	
State Bar Examiners	1,872 52	
Circuit Courts (Judges and reporters).....	79,524 70	
C. State Historical Society	15,863 17	
Free Library Commission	8,751 56	
W. N. G.—		
Adjutant General's Department	\$38,755 46	
Quartermaster General's Department	32,201 65	
		120,957 11
Spanish-American war items		131 88
U. S. war claims 1861-65, expense		965 66
Publishing Pub. printing notices		692 53
Deaf Mute Institution in cities		25,749 64
Academy of Sciences and Arts		539 65
County Training Schools for teachers		2,500 00
Free high schools		97,371 80
Manual training in high schools		3,500 00
Wisconsin Dairymen's Association		2,520 43
State Foremen's Association		500 00
Wisconsin Cheesemakers' Association		868 52
Wisconsin Cranberry Growers' Association		250 00
Wisconsin Horticultural Society		2,796 18
Inspector of Apiaries		373 43
Prevention of San Jose scale		294 19
Miscellaneous		162,939 60
D. Pan-American Exposition Commission		3,000 00
Bounty on wild animals killed		9,786 00
State Board of Agriculture		8,574 41
E. State Board of Immigration		5,207 71
Making statement of R. E. sales		1,262 42
County agricultural societies		52,268 53
Northern Wisconsin State Fair		2,813 41
F. Expert Accountants under ch. 153, L. 1899—		
G. D. Bartz, per diem and expenses.....	\$1,790 61	
S. W. Gilman, per diem and expense	488 06	
		2,287 71
G. Stationery account (being excess of purchases over distribution)		766 40
Legislature		7,769 23
Geological and Natural History Survey		18,041 39
Superintendent Public Property		87,112 38
Common schools	\$844 80	
	109,459 00	
	\$110,303 80	
	691,500 32	
		\$801,804 12
H. University and Agricultural College	*6,022 11	
	*164,568 48	
	*4,242 00	
	*418,446 84	
	*8,107 54	
		\$601,476 97
Normal schools	\$93,791 81	
	245,897 88	
		\$339,689 69
Institute lecturers		1,340 00
Deputy Fish and Game Wardens		37,762 56
		\$4,042,736 03
Total cost, including paper and stationery.....		
K. Less excess of "paper distributed" over paper purchased during the year		5,738 04
Total net expenditures during the year.....		\$4,036,997 99

*These sums are from pages 192, 193, 216, 217 and 488 of the report of the Secretary of State for 1900, excluding transfer entries.

Explanatory Notes.

- A. This includes Land Protection, Forest Warden, Draughtsman, etc.
- B. The difference between this total and that given by the Secretary of State is accounted for by the fact that certain bills are included in the accounts by the Board of Control the closing days of the fiscal term that do not get into the accounts of the Secretary of State until later.
- C. This is what the state aid amounted to in 1900 for this society. Now the state appropriation is \$10,000.00 annually.
The society has an income other than that voted by the Legislature, though it is admitted that such additional income is the property of the state, the State Auditor has no report of it.
- D. Included in this miscellaneous account shown by the report of the Secretary of State for 1900, page 198, is \$150,000.00 appropriation to the new Historical Library and \$12,000.00 to Sanborn and Berryman, "balance due on Statutes."
- E. No appropriation was made for the Board of Immigration by the last Legislature and its work was terminated in January, 1901.
- F. The plan of centralized accounting recommended by the expert accountants, under authority of Ch. 13, L. 1899, was adopted by the Legislature in the enactment of Ch. 433, L. 1901. The expense under Ch. 133, L. 1899, terminated in April, 1900.
- G. In showing the cost of each department the stationery distributed by the Superintendent of Public Property has been considered, and this item shows the expense purchase of stationery; over and above the amount shown is distributed. (See page 500 in the report of the Secretary of State for 1900.)
- H. This does not include \$79,000 borrowed by the University.
- K. In the cost of each department the paper used and waste sustained in printing reports, etc., and furnished to the State Printer by the Commissioners of Printing, has been considered, and this item is necessary to harmonize the value of paper distributed from paper room with purchases of paper during the year ending Sept. 30, 1900. (See pages 191 and 488 in the report of the Secretary of State for 1900.)
Paper (and waste thereon), as distributed, paper purchased and advertising bids for same, \$5,738.04.

The foregoing compilation was prepared by Stephen W. Gilman, attorney-at-law, Madison, Wis., while holding the position of Deputy Commissioner of this Bureau.

PART VI.¹

Women Employed in Factories.

During the past year this bureau has been endeavoring to gather such data as might tend to show in a general way the wage-earning capacity and the working environment of the women and girls employed in the factories of Milwaukee and certain other cities of the state. The information so obtained is presented herewith in both tabular and descriptive form and it is believed that it covers the subject in a fairly comprehensive way, though with an industrial life so extensive and varied as that which may be found in Wisconsin it proved impossible in the time allowed and with the present resources of the department to encompass the whole field or to dwell in particular upon any special portion of it. The report is rather the beginning of a proposed series of studies or investigations into the lives of the working women of Wisconsin and should be read in that light. No attempt has been made to solve any problem or to offer any remedy for existing ills. That which is given is merely a statement of what was seen and heard in the course of many hours spent in factories. The entire investigation was personally conducted and nothing appears in the report that has not received individual attention. The method by which the data was gathered was the simple and direct one of going to the workers themselves. Certain printed blanks with questions pertinent to the worker's life were prepared and on the

¹This part has been prepared by Miss Ida M. Jackson of Milwaukee, Assistant Factory Inspector in this state.

replies to these the tables that form part of the report are based. The descriptive matter is taken from personal notes. The two supplement each other, though for various reasons the descriptive portion covers a wider range of territory than do the tables. This is largely due to the difficulty experienced in getting the workers to fill out the blanks. In no case was a blank filled out by any one else than the worker herself accepted and this lessened the number obtained to those made out by workers who had been personally interviewed. In all 769 blanks, representing that number of girls employed in 34 different lines of factory work were thus obtained, while personal notes were taken of forty-five kinds of employment. In all 112 establishments were visited, many of them several times, and all of them at least twice. The plan pursued was to make an inspection of each place in company with the manager or foreman or someone delegated to the task of guide. In this way the work actually being done was noted and at the same time the views of those in authority were obtained with more or less definiteness. This inspection was followed by a visit at the noon hour when, relieved from their duties, the workers were generally found willing to discuss matters relative to their work and their lives. It is believed that in this way something of each point of view was secured, and that the report can not be accused, therefore, of leaning too much to either one side or the other. In addition to information gathered in both these ways much was gained in personal visits to workers outside of their business hours, though not enough of this was done to make it seem wise to draw any conclusions as to the home life of the factory class. The investigation has been strictly confined, therefore, to what women are doing in factories, what they are being paid for doing it and what they themselves believe regarding their work and its possibilities for advancement. An effort was made to gain some idea of their ambitions and also of their attitude towards certain other lines of work. As it is generally believed that to the extension of factory life for women is due the lack of workers in domestic service, an endeavor was made to reach the factory worker's point of view regarding housework. That particular portion of

the work, taken in connection with the special report on domestic service which appears in the present volume, is believed to be of unusual interest.

In selecting the employments considered in the report no effort was made to pick out the most arduous or the smallest paid. It was intended rather to reach as many varying lines of work in which women are engaged as possible, and to present the facts so that they might truthfully reflect the actual conditions. Most of the work was carried on in Milwaukee, since the greatest number of factories are centered there, but certain other cities in the state, such as Sheboygan, Kenosha, Oshkosh, Appleton, Neenah and Menasha were visited, as in each of these places factory life for women presents certain distinctive aspects. It must be remembered that only factory work was considered. Such employments as millinery, dressmaking, laundry work, telephone service, hotel service and so on were reserved for later inquiries, and the present one was confined to factory work exclusively.

The lines of employment in which schedules were obtained were:

- 1, bag factories; 2, box factories; 3, blind factories; 4, book binderies; 5, brass foundries; 6, breweries; 7, candy factories; 8, chair factories; 9, cigar box factories; 10, clothing factories; 11, enameling works; 12, envelope factory; 13, foundries; 14, fur garment factories; 15, glove factories; 16, grass twine factory; 17, hammock and fly net factories; 18, hosiery factory; 19, knitting factories; 20, lace paper factory; 21, paint factory; 22, paper bag factory; 23, paper mills; 24, papier mache factory; 25, shirt factories; 26, shoe factories; 27, soap factory; 28, straw works; 29, tin ware factories; 30, tobacco packing factories; 31, underwear factories; 32, toy factories; 33, trunk factory; 34, woolen mills.

In addition to these the employments covered by the notes include: 1, artificial flower and feather factory; 2, casket factory; 3, cotton batten mill; 4, dyeing and cleaning works; 5, lye works; 6, leather works; 7, match factory; 8, pearl button factory; 9, pipe covering factory; 10, rag shops; 11, watch factory.

Some of these have been combined under one head, and as in each factory a number of different employments were carried on, the investigation really represents a much larger field than would appear by the figures quoted above.

That part of the data which was thus obtained on the schedules and which admitted of tabulation, has been compiled into about forty tables, and these tables, together with a brief analysis of each, are presented first in order in this part. That part again which was obtained through personal observations and which did not admit of tabulation is given under "Personal Observations," immediately after the tables. The notes in this case have been classified by industries, and may be regarded as supplementary to the tables.

BIRTHPLACE OF EMPLOYEES.

Classification.	Number.	Per cent.
Wisconsin	549	71.59
Other U. S. States	86	11.19
Germany	93	12.74
Poland	5	.65
Russia	9	1.17
England	8	1.04
Other European countries	14	1.82
Total	769	100.00

It is interesting to note that in spite of the large foreign-born population of Wisconsin, over three-fourths of the wage-earning women reported in the present investigation were native born. Of the total of 769 coming under the scope of this inquiry, 549, or 71.39 per cent., were born in Wisconsin, and 86, or 11.19 per cent., in other states of the union, making a total of 635, or 82.58 per cent., who are Americans by right of birth. The proportion would probably have been still higher if a larger number of those industries calling for a higher degree of technical skill had been included in the investigation, instead, as was the case, of the inquiry being confined almost exclusively to those trades in which comparatively little skill is required. Such occupations offer the most profitable field for girls and women of the emigrant class, since the tasks are easily learned, and it would not have been surprising if a

predominance of foreign-born workers had been found among those reporting. As it proved, but 134, or 17.42 per cent., were born outside this country, and it is significant that of this number 98, or 12.74 per cent. of the total number reporting, were born in Germany, a proportion higher by 12, or 1.55 per cent., than that borne the whole by the number of those born in all the other states. Russia claims the next largest number, 9, or 1.17 per cent., and, curiously enough, 8, or 1.04 per cent., were born in England. But 5, or .65 per cent., were born in Poland, but this can scarcely be taken as indicative of actual conditions since many occupations are almost wholly in the hands of Polish born girls and women, while in nearly every industry included in the investigation Poles are to be found. The small proportion represented in the table is due rather to the fact that greater difficulty was experienced in obtaining information from Polish girls than from any other class. In many cases where the native born and German girls readily answered inquiries, not a girl of Polish birth could be persuaded to even examine the schedules, much less respond to their questions. Fourteen of the whole number of 1.82 per cent. were born in countries other than those cited, including Switzerland, Hungary, Wales, Holland, Norway, Austria and Canada.

BIRTHPLACE OF FATHERS OF EMPLOYEES.

Classification.	Number.	Per cent.
Wisconsin	103	13.39
Other U. S. States	52	6.76
Canada	9	1.17
Denmark	7	.91
England	15	1.95
Germany	462	60.08
Holland	8	1.04
Ireland	25	3.25
Norway	7	.91
Poland	21	2.73
Russia	9	1.17
Other European countries	51	6.64
Total	769	100.00

BIRTHPLACE OF MOTHERS OF EMPLOYEES.

Classification.	Number.	Per cent.
Wisconsin	115	14.96
Other U. S. States	58	7.54
Canada	8	1.04
England	7	.91
Germany	454	59.04
Holland	7	.91
Ireland	22	2.86
Poland	22	2.86
Russia	9	1.17
Other European countries	67	8.71
Total	769	100.00

Comparing the table showing the nativity of parents of the workers reporting with that showing the birthplace of the workers themselves, it will be seen that the figures as to native and foreign born are reversed, a large proportion of the parents having immigrated to this country. Taking up the table relating to the nativity of the fathers of employes reporting it will be seen that only 103, or 13.39 per cent., were born in Wisconsin and but 52, or 6.76 per cent., in other states of the union, making a total of 155, or 20.15 per cent., native born as contrasted to the 614, or 79.85 per cent., born in foreign lands. Of this latter number, 462, or 60.08 per cent., are natives of Germany, 25, or 3.25 per cent., of Ireland, 21, or 2.73 per cent., of Poland, and 15, or 1.95 per cent., of England. Nine of the fathers were born in Russia, and the same number are Canadians, while eight, or 1.04 per cent., were born in Holland. Denmark and Norway have the same representation, 7, or 91 per cent. Fifty-one, or 6.64 per cent., came from other European countries. A greater proportion of the mothers were native born, 115, or 14.96 per cent., having been born in Wisconsin, and 58, or 7.54 per cent., in other states, making a total of 173, or 22.50 per cent., born in the United States. This makes 18, or 2.35 per cent., more native born mothers than native born fathers. Four hundred fifty-four, or 59.04 per cent., of the mothers were born in Germany, this being 8, or 1.03 per cent., less than the number of fathers hailing from the Fatherland. Ireland and Poland are the birthplaces of an equal number of mothers, 22, or 2.86 per cent., this being less

in each case than the number of fathers coming from those two countries. The number of workers reporting Russia as the birthplace of their mothers is the same as those giving that country as the birthplace of their fathers. Eight, or 1.04 per cent., of the mothers came from Canada, and 7, or .91 per cent., from England, the last named number being the same for Holland. Other European countries were the birthplaces of 67, or 8.71 per cent., of the whole number..

MACHINE OR HAND LABOR, ETC.

Classification.	Number.	Per cent.*
Operating machine	245	31.86
Hand labor, or mostly so	495	64.37
Forewomen	27	3.51
Inspectors	2	.26
Total	769	100.00

Inquiry as to the kind of work done in the factory by women and girls shows that the largest number are employed in hand labor of one kind and another. Of the 769 employes reporting, 495, or 64.37 per cent., were engaged in tasks that were either wholly or in part done by hand, while 245, or 31.86 per cent., operated machines. Twenty-seven, or 3.51 per cent., held positions as forewomen, and 2, or .26 per cent., were inspectors. In many cases, however, the work of forewomen and inspectors was similar, as the forewoman herself is often merely an inspector with a few additional duties as monitor. She in her turn is under the authority of a foreman. The percentage of forewomen and inspectors responding to the schedules is comparatively small, as many refused to fill out the blanks on the ground that they were intended for the workers, not for those in places of authority.

TIME EMPLOYED WITH PRESENT EMPLOYER.

Classification.	Number.	Per cent.
15 years or over	7	.91
10 but under 15 years.....	32	4.16
5 but under 10 years.....	136	17.68
3 but under 5 years.....	157	20.42
1 but under 3 years.....	210	27.31
Under 1 year	227	29.52
Total	769	100.00

Perhaps the most striking deduction to be made from the table dealing with the length of time in which the workers had been in the employ of the establishments where they were found at the date of the inquiry, is that there is a lack of permanency in the service they render. Of the whole number, 227, or 29.52 per cent., had been at work less than one year, while 210, or 27.31 per cent., had been at work over one year, but less than three years. This goes to substantiate, in a measure, the statement frequently made by employers to the effect that while women workers are more conscientious in the discharge of the tasks assigned them, they do not always have the ambition which leads a man to stay in a position until he has mastered its demands. Such complaint was not made, however, by employers of skilled labor, but by those depending upon the unskilled class for the performance of work more or less monotonous. It was asserted that in such line of employment girls drift from one place to the other, apparently seeking a relief from irksome routine. Where a higher degree of skill was necessary before a fair wage could be earned this was not the case and it can be said safely that the lower the skill required and the more monotonous the task, the greater is the impermanency in the service of the worker.

From these two numbers, which represent 56.83 per cent. of the whole, the scale rapidly falls. But 157, or 20.42 per cent., had been at work three years but less than five; 136, or 17.68 per cent., five years, but under ten, and 32, or 4.16 per cent., ten but under fifteen years. The classification ends with those who had worked for the same employer over fifteen, and these numbered 7, or but .91 per cent., of the entire number reporting.

OCCUPATIONS IN WHICH PREVIOUSLY EMPLOYED.

Classification.	Number.	Per cent.
Dressmaking, sewing	12	1.56
Factory work	237	30.82
Housework (domestic)	148	19.25
Miscellaneous	58	7.54
Office work	25	3.25
No previous occupation	289	37.58
Total	769	100.00

The sources of supply from which the factory draws its women workers are indicated in the table above, which deals with the various occupations in which the women and girls concerned in this report were employed previous to engaging in that in which they were found at the time of the inquiry. The most noticeable fact, here demonstrated, is that the greatest number of workers responding to the schedules had had no previous occupation. They numbered 289, or 37.58 per cent., of the whole. This may seem to contradict the inference of instability of service, drawn from the preceding table, but such a conclusion could not be reached with any surety from the data on hand. It rather indicates that a very large number of those responding were young girls, often fresh from the lower schools and at the threshold of their working career. This can not be accurately proved, as no record of the ages was taken, but by far the greater number of respondents were in their teens. What really serves to strengthen the impression of the factory girl's wandering proclivities is the fact that 237, or 30.82 per cent., had worked in other factories than the ones in which they were found, almost as large a number as those who had done no work at all.

Next in point of number to those coming from other factories are the girls who were engaged in housework before going into the factory, and who number 148, or 19.25 per cent. Twenty-five of 3.25 per cent. had done office work, and 12, or 1.56, had been seamstresses or dressmakers. The remaining 58, or 7.54 per cent., had been engaged in a variety of occupations, including laundry work, teaching, millinery, clerking, telephone operating and nursing.

DO PRESENT DUTIES REQUIRE SPECIAL SKILL AND ARE THEY DIFFICULT TO LEARN?

Classification.	Number.	Per cent.
Special skill is required	240	31.21
Little special skill but some practice required	529	68.79
Total	769	100.00

TIME REQUIRED TO BECOME FAMILIAR WITH PRESENT DUTIES.

Classification.	Number.	Per cent.
1 year or more	57	7.41
6 months but less than 1 year	42	5.46
1 month but less than 6 months	153	20.68
1 week but less than 1 month	170	22.11
A nominal time only	341	44.34
Total	769	100.00

The two tables immediately preceding are so closely related that it has been deemed best to consider them together rather than separately. They have to do with the quality of the work done by women and girls in factories and with the time required for the workers to master the details of the special tasks assigned to them. The statement heretofore made in this report that a large proportion of those responding to the inquiry belonged to the unskilled class is further borne out by the table in which the replies to the question, "Do your present duties require special skill and are they difficult to learn?" have been classified. But 240, or 31.21 per cent., lay claim to doing skilled work, the other 529, or 68.79 per cent., being employed in occupations that, while requiring more or less practice, call for the exercise of but little skill, a fact corroborated by the observation of the inspector who conducted the inquiry.

This is further shown by the table presenting the various lengths of time required to attain proficiency. Nearly one-half the girls—in exact figures, 341, or 44.34 per cent.—gave a merely nominal time. Many of these replied to the question, "How long did it take you to become familiar with your present duties?" by the statement "No time at all," and others put the time at from half a day to one week. All these replies were classified under the head of "nominal time." Those who had spent over a week, but less than a month, in learning their tasks

numbered 170, or 22.11 per cent. One hundred and fifty-nine, or 20.68 per cent., had spent over one month, but less than six months, in mastering the details of their work, and 42, or 5.46 per cent., had put in over six months, but less than one year. Only 57, or 7.41 per cent., were doing work that had required a service of one year or more before skill could be acquired. Under this latter classification were several who, after working two and three years, replied that they were "still learning."

ARE DUTIES TIRESOME OR EXHAUSTING?

Classification.	Number.	Per cent.
Tiresome or exhausting	164	21.33
Not very exhausting	104	13.52
Not exhausting	501	65.15
Total	769	100.00

In endeavoring to ascertain the worker's opinion of her task, the question "Are your duties tiresome or exhausting?" was asked and it is rather surprising to note that 501, or 65.15 per cent., answered this in the negative, and that but 164, or 21.33 per cent., admitted that the work required of them was in any way hard. The remaining 104, or 13.52 per cent., qualified their replies by saying that their duties were "not very exhausting." It is undoubtedly true that tasks that to the on-looker seem onerous are not deemed so by the workers themselves. Much depends upon the point of view. The factory worker, accustomed from childhood to a life of toil, accepts certain things as inevitable. Bodily weariness becomes so much a part and parcel of life that its absence would be more remarkable than its presence. Moreover, constant repetition tends to lighten the immediately exhausting effects of a task, whatever its effects may be in the end. Many girls, when personally questioned, said that their work was "not hard now," or that they had "grown used to it." Another fact to be taken into consideration is the girl's reluctance to put down on paper what might, if her employer should see it, be construed into a criticism of her job. Work is not so easily obtained that many risks can be taken and it is likely that many girls who might to themselves admit that their work demands too heavy a drain upon their strength, would not make such a statement to anyone else.

ACTUAL WEEKLY EARNINGS OF EACH EMPLOYEE, TOGETHER WITH THE TOTAL EARNINGS PER WEEK FOR ALL IN EACH CLASS, AND THE AVERAGE WEEKLY EARNINGS TO EACH EMPLOYEE AT THE TIME OF REPORTING.

Classification.	Number.	Total Wages.
Average of \$11.70 per week	13	\$152 10
\$9.00 per week	9	81 00
8.50 per week	4	34 00
8.00 per week	10	80 00
7.50 per week	14	105 00
7.00 per week	30	210 00
6.75 per week	6	40 50
6.50 per week	8	52 00
6.00 per week	65	390 00
5.50 per week	17	93 50
5.25 per week	22	115 50
5.00 per week	76	380 00
4.75 per week	46	218 50
4.50 per week	67	301 50
4.25 per week	36	153 00
4.00 per week	67	268 00
3.75 per week	35	121 25
3.50 per week	57	199 50
3.25 per week	32	104 00
3.00 per week	91	273 00
2.75 per week	21	57 75
2.50 per week	26	65 00
2.25 per week	5	11 25
2.00 per week	10	20 00
1.75 per week	2	3 50
Total	769	\$3,528 85
Average weekly wages to each employee		4.59

ACTUAL HIGHEST WEEKLY EARNINGS EVER RECEIVED BY THOSE INCLUDED IN THIS INVESTIGATION, TOGETHER WITH THE TOTAL EARNINGS PER WEEK AND THE AVERAGE WEEKLY EARNINGS TO EACH PERSON.

Classification.	Number.	Total Wages.
Average \$13.50 per week	25	\$337 50
\$9.00 per week	17	153 00
8.50 per week	7	59 50
8.00 per week	16	128 00
7.50 per week	25	187 50
7.25 per week	10	72 50
7.00 per week	22	154 00
6.75 per week	17	114 75
6.50 per week	10	65 00
6.00 per week	62	372 00
5.50 per week	38	209 00
5.25 per week	24	126 00
5.00 per week	63	315 00
4.75 per week	34	161 50
4.50 per week	12	54 00
4.25 per week	26	110 50
4.00 per week	90	360 00
3.75 per week	27	101 25
3.50 per week	50	175 00
3.25 per week	26	84 50
3.00 per week	72	216 00
2.75 per week	7	19 25
2.50 per week	16	40 00
2.25 per week	7	15 75
2.00 per week	4	8 00
1.75 per week	2	3 50
Total	769	\$3,643 00
Average weekly earnings to each employee		4.74

ACTUAL LOWEST WEEKLY EARNINGS EVER RECEIVED BY THOSE INCLUDED, TOGETHER WITH THE TOTAL WEEKLY EARNINGS AND THE AVERAGE WEEKLY EARNINGS TO EACH EMPLOYEE.

Classification.	Number.	Total Wages.
\$6.75 per week	3	\$20 25
6.00 per week	4	24 00
5.00 per week	11	55 00
4.75 per week	13	61 75
4.50 per week	20	90 00
4.25 per week	12	51 00
4.00 per week	21	84 00
3.50 per week	63	220 50
3.25 per week	26	84 50
3.00 per week	77	231 00
2.75 per week	32	88 00
2.50 per week	95	237 50
2.25 per week	54	121 50
2.00 per week	110	220 00
1.75 per week	52	91 00
1.50 per week	107	160 50
1.25 per week	24	30 00
1.00 per week	35	35 00
Total	769	\$1,905 50
Average weekly earnings to each employee		2.48

The three tables preceding show the wage-earning history of the 769 women and girls under consideration. The first table presents the actual weekly earnings of each employe at the time of the investigation, together with the total weekly earnings for all in each class and the average weekly earnings for each employe. The second table presents the actual highest weekly earnings ever received by these same persons, together with the total highest earnings per week for each class and the highest average weekly earnings for each individual. The third table covers the same thing from the standpoint of the lowest point in the wage earning history of each person, and the three, taken separately or together, offer some unusual and valuable information.

It will be seen that the greatest number of persons in any one class of the table dealing with the weekly earnings which were received at the time of the investigation are the 91 who were making \$3.00 a week, while the smallest number were the two who were receiving but \$1.75 for a week's services. It is interesting to note that in a scale which runs from \$1.75 to \$11.70, which is the average of the thirteen persons who received over \$9.00 a week, the greatest number of individuals is massed about midway between the two extremes, 611 being concentrated between the \$6.00 and \$3.00 points. The average weekly earnings for the 769 at the time of inquiry were \$4.59.

Somewhat significant is the fact that the second table, which deals with the highest weekly earnings ever received by the individuals under consideration, gives the average for each person as \$4.74, which is slightly above that of the average earnings at the time of the inquiry. This might be taken to indicate a depreciation in the wage earning capacity of the workers or a falling in the scale, though being but .15 per cent. it is not so large as to be alarming. It does, however, corroborate the informal statements of many of the older workers who, looking back over working careers of from ten to thirty years, declared that there has been a steady decline in wages in that time. The figures in the two tables would seem to justify their point of view. It will also be seen that the range of the scale in the second table is greater than that of the first, beginning with the same \$1.75 but going to \$13.50, which is the average of the twenty-five workers who at some previous period in their careers had earned over \$9.00 a week. The concentration between the \$3.00 and \$6.00 class is not so large, being 523.

The average for the lowest wages ever received by the 769 workers, as will be seen from the third table of this series, was \$2.48 a week, while the scale runs from \$1.00, which was received by thirty-five, to \$6.75, the latter being the lowest figure at which three of the workers began their careers. The greatest number in any one class in this table is the 110 who started at \$2.00 a week, although there are almost as many in the \$1.50 class, 107 having begun work at those wages. The concentration here is between the \$1.50 and \$3.50 points, 615 being included between those amounts, showing how very small is the wage paid girls at the beginning of their working careers.

CLASSIFIED WEEKLY EARNINGS RECEIVED AT THE TIME OF REPORTING.

Classification.	Number.	Per cent.
Less than \$3.00	64	8.32
\$3.00 but under \$4.00	215	27.96
4.00 but under 5.00	216	28.09
5.00 but under 6.00	115	14.96
6.00 but under 7.00	79	10.27
7.00 but under 8.00	44	5.72
8.00 but under 9.00	14	1.82
9.00 and over	22	2.86
Total	769	100.00

CLASSIFIED HIGHEST WEEKLY EARNINGS EVER RECEIVED, AS
REPORTED BY THE EMPLOYEES.

Classification.	Number.	Pe. cent.
Less than \$3.00	36	4.68
\$3.00 but under \$4.00	175	22.76
4.00 but under 5.00	222	28.87
5.00 but under 6.00	125	16.26
6.00 but under 7.00	89	11.57
7.00 but under 8.00	57	7.41
8.00 but under 9.00	23	2.99
9.00 and over	42	5.46
Total	769	100.00

CLASSIFIED LOWEST WEEKLY EARNINGS.

Classification.	Number.	Per cent.
Under \$3.00 per week	519	67.49
\$3.00 but under \$4.00	166	21.59
4.00 but under 5.00	66	8.58
5.00 but under 6.00	11	1.43
6.00 but under 7.00	7	.91
Total	769	100.00

In the three tables above the same facts have been reduced to smaller compass for the sake of easier study and comparison. Instead of giving the actual wages received by the workers, they are divided into approximate classes, all those making less than \$3 a week being classed together and all those making \$9 and over forming a separate class, while those earning various amounts between these two figures are separated into six classes, viz.: those making \$3 but less than \$4 a week; those making \$4 but less than \$5; those making \$5 but less than \$6; those making \$6 but less than \$7; those making \$7 but less than \$8, and those making \$8 but less than \$9.

Taking up, first of all, the table giving the earnings at the time of the investigation, it will be seen that the largest class is that making \$4 but less than \$5 a week. It numbers 216, or 28.09 per cent., which is but a trifle more than the class making \$3 but less than \$4, the latter numbering 215, or 27.96 per cent. of the total. The smallest class is that included under the head of those making \$8 but less than \$9, which forms but 1.82 per cent. of the whole. Those making \$9 and over come to 2.86 per cent.

In the table giving the highest wages ever received by the workers, the largest class is that which made \$4 but less than

\$5 a week. It numbers 222, or 28.87 per cent., while the smallest class, as was the case in the table giving present earnings, is that included under the head of those who made \$8 but less than \$9 and who numbered 2.99 per cent. Those who made \$9 or over formed 5.46 per cent.

Grouped into the same classes, the facts presented in the third table, which gives the lowest wages received, are unusually interesting. The most significant, perhaps, is the great proportion of workers who started at less than \$3 a week. The actual number of the individuals is 519 and they form 67.49 per cent. of the whole or almost three-fourths of the whole. Those who began in the the \$6 class number but 7, or .91 per cent.

COMPARISONS OF WEEKLY EARNINGS.

Classification.	Time of Reporting.		Highest Wage.		Lowest Wage.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Less than \$3.00 per week	64	8.32	36	4.68	519	67.49
Less than 5.00 per week	495	64.37	433	56.31	7.1	97.65
Less than 6.00 per week	610	79.33	558	72.57	762	99.09
\$6.00 and over	159	20.67	211	27.43	7	.91

In the last table of the series dealing with weekly earnings, the facts heretofore presented are still further reduced for the purpose of comparison. All the returns have been brought into four classes: Those making less than \$3.00 a week; those making less than \$5.00 a week; those making less than \$6.00 a week and those making \$6.00 a week and over. Under these heads are arranged the figures showing the number of those reporting the wages they were receiving at the time of the inquiry as well as the highest and lowest wages they had ever received. The inferences are so obvious that there is no need of drawing far fetched deductions. The figures speak for themselves, but each class is worthy of separate and special analysis.

It will be seen that at the time of the inquiry there were but 64, or 8.32 per cent. receiving less than \$3.00 a week. Thirty-six, or 4.68 per cent., had never made any more than that and for 519, or 67.49, that amount was the lowest they had ever received. There is a uniform increase in all the figures of the next group which includes those making less than \$5.00 a week. At

the time of the inquiry these numbered 495, or 65.37 per cent. For 433, or 56.31 per cent., the highest wage point ever reached was less than \$5.00 and 751, or 97.66, had started at less than that figure. The third group comprises those who had received less than \$6.00 a week. Out of the 769 reporting, there were 610 receiving less than \$1.00 a day at the time of the inquiry, or 79.33 per cent., which is more than three-fourths of the whole. The highest wages ever received by 558, or 72.57, came to less than \$6.00 a week and 762, or 99.09 per cent., had begun below the \$1.00 a day point. Those who received \$6.00 a week or over at the time of reporting numbered 159, or 20.67 per cent. The highest wages received by 211, or 27.43 per cent., came to \$6.00 a week or over. The number beginning work at \$1.00 a day or over was very small, being but 7; or .91 per cent.

It will be seen readily that by far the greater number of women wage earners make less than \$1.00 a day and that a very large proportion come under the classification of less than \$5.00 a week. How few occupations offer women workers an opportunity of working up from the \$1.00 a day scale is intimated by the very few who gave that figure as their starting point. Usually, it will be seen, the \$1.00 a day, from being the starting point, is the goal which over three-fourths never reach.

YEARLY EARNINGS OF EACH EMPLOYE INCLUDED AND AVERAGE YEARLY EARNINGS TO EACH.

Classification.	Number.	Total yearly earnings.
Average of \$507 per year	7	\$3,549
\$450 per year	7	3,150
425 per year	11	4,675
400 per year	28	11,200
375 per year	10	3,750
350 per year	44	15,400
325 per year	18	5,850
300 per year	67	20,100
275 per year	18	4,950
250 per year	81	20,250
225 per year	52	11,700
200 per year	95	18,000
175 per year	67	11,725
150 per year	87	13,050
125 per year	63	7,875
100 per year	38	3,800
75 per year	27	2,025
50 per year	34	1,700
25 per year	16	400
10 per year	4	40
Total	769	\$163,189

Average yearly earnings to each employee..... \$212 21

The preceding table is devoted to net yearly earnings as distinguished from weekly wage rates. A wage earner's theoretic income, based on a given weekly wage, may be a very different thing from what the wage earner actually receives in the course of a year. Continuity of wage in factory work depends upon continuity of service, and the slightest deviation from the stipulated hours of work is likely to be reflected in the Saturday night envelope. When the factory closes down for repairs or when it is overtaken by the dull season that is likely to occur in every trade the worker's wages stop. They stop, too, when through her own or her family's sickness or misfortune she is kept at home. Many causes tend to contribute to the amount of lost time charged to her account during the year and though in many cases she can not be held responsible she is obliged to pay the penalty in the shape of a decrease in her annual income. This accounts for the difference between the amounts given by the workers under consideration as their yearly incomes and the amounts that could be obtained by multiplying the weekly wage rates by the number of weeks in a year.

In the table the actual yearly earnings as given by the workers themselves appear. It will be noted that the amounts run from \$10, which was the estimate of the incomes of four beginners who had been at work but a few weeks, to an average of \$507 for the seven workers who went over the \$500 mark. There were only seven also in the \$450 class, but the \$400 mark was reached by twenty-eight. Forty-four made \$350; sixty-seven, \$300; eighty-one, \$250, and ninety, \$200, the latter being the largest number in any one class. From there on there is a decrease in the number, though eighty-seven give \$150 as their yearly incomes and sixty-three, \$125. The average yearly income for each employe is \$212.21. This would give a weekly rate of \$4.08. The average weekly wage, it will be remembered, was \$4.59. In view of the explanation given above the disparity between the two rates is not remarkable. It shows, however, that what a workingwoman is supposed to make is not always what she actually receives.

CLASSIFIED YEARLY EARNINGS.

Classification.	Number.	Per cent.
Under \$100 per year	81	10.53
\$100 but under \$200	254	33.02
200 but under 300	242	31.47
300 but under 400	139	18.08
400 but under 500	46	5.93
500 and over	7	.91
Total	769	100.00

To present the same information in a more condensed form, the yearly incomes of these 769 workers have been classified and arranged in a shorter table which can be more readily studied. The unit of \$100 has been used for the classification, those receiving less than that amount forming one group, and those receiving \$500 and over, another. These represent the two extremes in the yearly incomes under consideration, and between them are four other groups: those receiving \$100, but under \$200; those receiving \$200, but less than \$300; those receiving \$300, but less than \$400, and those receiving \$400, but less than \$500. This covers in succinct form all the information given in more detail elsewhere. It will be noted that the largest number in any one group comes under the head of those making \$100, but less than \$200 a year, 254 being so classified. Almost as many, however,—in exact figures, 242—made over \$200, but less than \$300. Between the \$100 and \$300 points almost two-thirds of the entire number of workers responding, or 496, are concentrated. The next highest number is that included in the group which made \$300, but less than \$400, and which numbers 139. Only seven made over \$500 and eighty-one fell below the \$100 mark.

CLASSIFIED WEEKLY EARNINGS OF WOMEN EMPLOYED IN MANUFACTURING, AS REPORTED BY EMPLOYERS.

Industries.	Under \$5.00.	\$5 but under \$6.00.	\$6 but under \$7.00.	\$7 but under \$8.00.	\$8 but under \$9.00.	\$9.00 and over.	Total persons.
Boots and shoes	450	128	103	72	63	120	936
Boxes	37	5	7	.....	.....	.....	49
Breweries	511	216	1	1	.....	50	779
Clothing	1,183	1,047	372	187	73	111	2,973
Confectionery, crackers	1,108	66	20	10	2	1	1,207
Electric and gas apparatus	82	34	13	2	.....	2	133
Knit goods	1,672	380	285	157	83	118	2,695
Paper mills	709	66	90	19	18	62	964
Sheet metal	256	17	1	.....	1	.....	306
Sash, door and blinds	7	1	3	1	.....	.....	12
Miscellaneous	568	202	21	22	12	21	846
Total	6,613	2,162	916	471	252	485	10,899

CLASSIFIED WEEKLY EARNINGS OF WOMEN EMPLOYED IN CERTAIN MANUFACTURING INDUSTRIES, AS REPORTED BY THE EMPLOYERS.

Industries.	Under \$5.00.	\$5 but under \$6.00.	\$6 but under \$7.00.	\$7 but under \$8.00.	\$8 but under \$9.00.	\$9.00 and over.	Total persons.
Boots and shoes	9	5	6	4	3	2	29
Boxes, etc.	20	2	.....	.....	.....	.....	22
Breweries	27	5	.....	.....	.....	.....	32
Clothing	18	6	11	4	.....	2	41
Confectionery	35	13	1	.....	2	.....	51
Electric and gas apparatus	9	7	2	.....	.....	.....	18
Knit goods	13	12	7	12	6	17	67
Paper and pulp	26	.....	12	1	.....	.....	39
Sheet metal	39	3	3	2	.....	1	48
Sash, doors and blinds	7	1	2	.....	.....	.....	10
Miscellaneous	42	2	10	10	1	5	70
Total	245	56	54	33	12	27	427

COMPARISON OF THE EMPLOYERS' AND EMPLOYEES' REPORTS OF THE WEEKLY EARNINGS OF WOMEN EMPLOYED IN CERTAIN MANUFACTURING INDUSTRIES.

Classification.	Employer's Report.		Employees' Report.	
	Number.	Per cent.	Number.	Per cent.
Under \$5.00 per week	6,613	60.68	245	57.38
\$5.00 but under \$6.00	2,162	19.84	56	13.11
6.00 but under 7.00	916	8.40	54	12.65
7.00 but under 8.00	471	4.32	33	7.73
8.00 but under 9.00	252	2.31	12	2.81
9 and over	485	4.45	27	6.32
Total	10,899	100.00	427	100.00

To gain still another view of the wage conditions, certain typical industries were selected for a comparison of the wage scale as reported by both employers and employees. Employers in these industries reported on a total of 10,899 workers, taking their figures from their payrolls, while in the same industries 427 workers were personally interviewed as to the wages they were receiving. The facts as given by each side are presented separately in the first two tables and in the third are reduced and further classified for a closer comparison. In spite of the wide difference in the number reported by the employers and those who were seen personally it is interesting to note that there is no great variance in the facts themselves and that the percentage of those receiving the lowest class of wages is even higher in the returns from employers than from employees. For example, the employers report 60.68 per cent. as receiving wages below \$5 a week, while among the employees reporting, 57.38 received wages below that amount. For those between the \$5 and \$6 points the percentage from the employers' returns is slightly higher than as given by the employees, being 19.84 to the latter's 13.11 per cent.. The variance in the next two classifications is about 2 per cent., the employers reporting 12.72 per cent. as receiving wages between \$6 and \$8 a week and the employees 10.38 per cent. For the class between the \$8 and \$9 points the percentage is almost the same, being 2.31 for the employers and 2.81 for the employees. It is noticeable, also, that in reporting on those receiving the highest division of wages, \$9 and over, the employers report but 4.45 per cent. and the employees 6.32.

CHANGES IN WAGES.

Classification.	Number.	Per cent.
Increase ..	430	55.92
Decrease ..	59	7.67
No change ..	280	36.41
Total ..	769	100.00

In reporting on changes of wages within their personal experience, 430, or 55.92 per cent., said that in their opinion wages

had a tendency to constantly increase, while 59, or 7.67 per cent., thought there was a movement in the opposite direction. Among those who held to the last named opinion were the older workers who had lived through financial panics with their subsequent depressions and who said that such events were always felt most keenly by the wage earners, whose incomes going down at such times did not speedily resume their former figure. On the other hand, 280, or 36.41 per cent, said that they could see no change in either way.

COST OF BOARD AND ROOM PER WEEK.

Classification.	Number.	Total per week.
Average of \$4.25 per week	43	\$182 75
3.50 per week	28	98 00
3.25 per week	27	87 75
3.00 per week	112	336 00
2.75 per week	45	123 75
2.50 per week	96	240 00
2.25 per week	45	101 25
2.00 per week	64	128 00
1.75 per week	14	24 50
1.50 per week	12	18 00
1.25 per week	5	6 25
1.00 per week	6	6 00
Total	497	\$1,352 25
Weekly average to each employee		\$2 72
Yearly average to each employee		\$141 44

272 persons did not report as to the cost of board.

In endeavoring to ascertain the cost of room and board for these workers it speedily developed that many could give no definite information on that point as they lived at home, paying no stated sum, but relinquishing all their earnings to their parents. Consequently replies were received from only 497 persons. It is safe to conclude that the other 272 lived at home, paying no board, at least in the ordinary way, and hence felt that the question did not apply to them. Wherever a girl had made a definite arrangement, by which she paid a stated sum for board and lodging, either under her parents' roof or in the home of a stranger, she readily made known the terms on which she secured them, so that the 272 who failed to reply would have done so,

presumably, if they had not been living at home. The table above shows the actual cost of board and lodging for the 497 reporting, and also the average cost of board for each person. The scale runs from \$4.25 a week, which was the average rate paid by 43 workers who regularly paid over \$3.50 a week, to \$1.00 a week, which six paid. The most popular rate seemed to be \$3.00, which 112 persons paid, and next to this came \$2.50, which 96 paid. Sixty-four paid \$2.00 and 45, \$2.25. From there the scale runs down to \$1.00. The smaller amounts represent as a rule the girls' contributions toward the family maintenance rather than actual rates, for where girls were not bound by the custom of turning over their entire wages to their parents, they almost invariably paid down a certain proportion of their earnings, calling it the cost of their board and lodging, though in some cases it could not, of course, cover the actual expenses.

The average rate for the 497 was \$2.72 a week, or \$141.44 a year, and it is believed that these figures fairly represent the actual expense for the typical factory worker.

CLASSIFIED COST OF BOARD AND ROOM.

Classification.	Number.	Per cent.
Under \$2.00 per week	37	4.81
\$2.00 but under \$3.00	250	22.51
3.00 but under 4.00	167	21.72
4.00 and over	45	5.59
Not reporting	272	35.37
Total	769	100.00

In this table the weekly rate for board and lodging has been arranged in classified form. Here it can be seen that 4.81 per cent paid less than \$2.00 a week; 32.51 per cent, \$2.00, but under \$3.00; 21.72 per cent. \$3.00, but under \$4.00, and 5.59 per cent. \$4.00 and over. The greatest number came in the class of those who paid \$2.00 but under \$3.00, and the smallest in the class of those who paid under \$2.00.

COST OF BOARD AND ROOM PER WEEK, DAY AND YEAR FOR THOSE WHO WERE BOARDING.

Classification.	Number of persons.	Cost per week to each employe.	Cost per day to each employe.	Cost per year to each employe.
1	43	\$4 25	\$0 61	\$221 00
2	28	3 50	50	182 00
3	27	3 25	46	169 00
4	112	3 00	43	156 00
5	45	2 75	39	143 00
6	96	2 50	36	130 00
7	45	2 25	35	117 00
8	64	2 00	29	104 00
9	14	1 75	25	91 00
10	12	1 50	21	78 00
11	5	1 25	18	65 00
12	6	1 00	14	52 00
13				
Total and averages	\$4 97	\$2 72	\$0 39	\$141 44

In the third table relating to the cost of board and lodging the actual rates paid by the 497 reporting have been arranged by the day, week and year, the averages for each being given. It is shown that the average weekly rate is \$2.72, the daily rate \$.39, and the yearly rate \$141.44. The table is so plainly arranged that it requires no explanation, and taken in connection with those immediately preceding it makes an interesting summary of this most necessary expense for all working women.

SHOWING THE RESPECTIVE NUMBER OF THOSE WHO HAD SAVED SOME MONEY, AND OF THOSE WHO HAD NOT BEEN ABLE TO SAVE ANYTHING SINCE BECOMING WAGE-EARNERS.

Classification.	Number.	Per cent.
Saved some	143	18.60
Not saved any	626	81.40
Total	769	100.00

Considering all the facts that have been brought out previously in this report, it is not surprising to find that less than one-fourth of the number responding report any savings. The mere question, when personally put, was invariably provocative of mirth and a negative answer was made usually. This was true of every trade investigated and applies with equal force both to those workers who were receiving wages that could be

called fair and to those whose earnings fell below the average. Apparently the living expenses of the workers kept steady pace with their incomes. In many cases this could be accounted for by the custom referred to in connection with the cost of board and lodging. Girls who relinquish all personal right to their earnings, turning them into a common family fund, cannot well have individual savings. They may have a share in the co-operative accumulations of the family, but if they have it is usually an indefinite one not clearly recognized by the other members. It is significant that those who reported savings were for the most part workers living away from their homes or without family demands upon their incomes. Or they were girls who, while living at home, paid a definite sum for their board and handled what remained of their wage to please themselves. This might seem to suggest that the lack of ambition ascribed to girls in factories is due, to some extent at least, to the fact that they do not always enjoy a direct reward for greater exertion. "What difference does it make? I wouldn't get any more out of it if I should earn more," is a sentiment they frequently express in conversation. The period of betrothal sometimes ushers in a new era for the individual worker, who with a prospective home of her own in view is permitted to withdraw her usual contribution to the family support that she may save for the purchase of a trousseau. Where a girl is still unmarried at her twenty-first birthday a new arrangement is sometimes made by which she pays a stipulated amount for board, keeping all above that amount for herself, but in course of the present investigation many instances were encountered of women in their late twenties and thirties who were still, as when children, turning over to their parents their Saturday night envelopes.

The table above is based on the replies to the several questions: "Have you saved any money this year?" "Were you able to save any money last year?" "Have you saved any money since becoming a wage earner?" Most of these answers, it will be seen, were in the negative, 626, or 81.40 per cent., reporting not having saved anything, while 143, or 18.60 per cent., had been able to put something by.

SHOWING CLASSIFIED SAVINGS OF THE 143 PERSONS WHO REPORTED
HAVING SAVED SOME MONEY SINCE BECOMING WAGE-EARNERS.

Classification.	Number.	Per cent.
\$500 or more	7	4.90
300 but less than \$500	13	9.09
100 but less than 300	53	37.06
Less than \$100	70	48.95
Total	143	100.00

This table shows the classified earnings of the 143 individuals referred to. The highest class is made up of those who had saved \$500 and over and these number 7 or 4.90 of the whole number reporting. Thirteen, or 9.09 per cent., had saved \$300 but less than \$500 and 53, or 37.06 per cent., \$100, but less than \$300. Seventy, or 48.95 per cent., had saved sums under \$100, ranging in amount from \$10.00 to \$75.00. In the \$500.00 and over class the highest figure was reached. This table shows the classified earnings of the 143 individuals referred to.

The highest figure in the \$500.00 class was by a worker who made sample garments in a clothing factory and out of a weekly wage of \$7.00 had put away \$900. The next highest amount was reported by an inspector in a hosiery factory who had saved \$700.00 on a wage of \$8.40 out of which she paid \$4 a week for board and lodging. A cutter in the same factory, making \$9.00 a week and paying \$3.50 a week board, had saved \$600. A foreman in a candy factory, making \$8 a week and paying \$3.50 board, had accumulated \$500. Another foreman in the same factory, making the same wages and paying \$4 for her board, had saved \$100. A worker on fur garments, making \$6 and paying \$2 board, had saved \$300. In the same factory, a more skilled worker receiving \$9 a week and paying \$4 board had put by but \$150. Two girls in a brewery, on wages of \$5 had \$100 apiece in the bank. A buttonhole worker in a shirt factory making \$6 had saved 200. An overall maker working by the piece and averaging \$5.50 had saved \$150, while paying \$2.50 board. Three girls in a paper mill on a weekly wage of \$6 had saved \$100 each. A weaver in a woolen mill making \$7.50 a week had saved \$150 in spite of being obliged to keep up a house

for herself and children. A girl in a brass factory making \$7.50 and paying \$4 board had saved \$300.

TIME EMPLOYED DURING 1901.

Classification.	Number of employees.	Total time.
12 months of full time	338	4,056
11 months	127	1,397
10 months	98	980
9 months	54	486
8 months	30	240
7 months	21	141
6 months	29	174
5 months	20	100
4 months	19	76
3 months	18	54
2 months	10	20
1 month	5	5
Total	769	7,729
Average to each person		10.05

To gain some idea of the actual working time of the persons concerned in this report, each was asked to state just how many weeks or months she had been employed during the year previous to that in which the investigation was made. The period chosen was a fairly average one, with no great financial depression or any unusual prosperity that might affect the opportunities it offered for employment and it was not so far in the past that its events could not be recalled with distinctness by the workers, whose replies, as they appear in the preceding table, may therefore be regarded as fairly accurate. It will be seen that the average working year of the 769 persons covered only 10.05 months, leaving almost two months of idleness, chosen or enforced, but still unproductive. A large proportion of the girls worked the entire year, 338, or 44 per cent., reporting that they had been employed the full twelve months. From this on, however, there is a constantly decreasing scale, beginning with the 127, or 16.5 per cent., who worked eleven months and running down to the five who were employed only one month during 1901. In many cases the short working time was due to the fact that the girls had only recently left school and entered the factory. Older and more experienced hands reported no such great loss of time, though in some occupations having strongly defined seasons of trade four and five and even six months were

lost out of every year, the total income being greatly reduced in that way. On the other hand, there were girls who reported having worked every day of the year except on Sundays and legal holidays, taking no vacation whatever.

CAUSES OF LOST TIME IN 1901.

Classification.	Number.	Per cent.
Sickness	323	42.00
Out of work	174	22.63
Home duties to attend to	68	8.84
Voluntarily laid off, etc. (wanted rest)	204	26.53
Total	769	100.00

In investigating the causes for this lost time it becomes apparent that much of it is due to sickness, 323 girls or 42 per cent. of the whole reporting illness as the reason why they had not worked the entire year through. Lack of work was given as the cause for the idleness of 174 or 22.63 per cent. On the other hand, 204, or 26.53 per cent., voluntarily "laid off," taking at their own expense the vacations not allowed them by their employers. Sixty-eight, or 8.84 per cent., were kept from work by the necessity of performing home duties of various sorts. None of the girls reported vacations given at the expense of the firm. Indeed, "vacation" seems to be interpreted generally in the factory as the time, when for repairs or because of the slackness of the season, the shop closes its doors for a period more or less extended, leaving its workers grateful for the rest, no doubt, but without any wage coming in to tide them over to the time of resumption of work. In factories that were unaffected by seasons and which never closed down, girls who had worked for years without a rest could always be found. Individual instances of continuous service for ten, twelve, even fifteen years were not uncommon, though many employers complained that girls would not work the year through but took vacations when they wished them, even at the risk of losing their positions.

BUSIEST SEASON.

Classification.	Number.	Per cent
No variation	218	28.35
Summer and autumn	358	46.55
Winter and spring	193	25.10
Total	769	100.00

It will be seen by this table that while 218, or 23.35 per cent. find no variation in the amount of work expected of them, 358, or 46.55 per cent., are kept busiest in the summer and autumn and 193, or 25.10 per cent., in the winter and spring. In certain industries there are great extremes of activity, periods of depression when there is not enough work to keep all the employes busy being followed by months, when every one is driven to the utmost expenditure of energy and when the workers are lucky if they escape without being required to put in several hours of over-time each day. One period seems to have as many drawbacks as the other. When the factory is being run to its greatest capacity and every worker is being pushed to the point of exhaustion work is done under a strain and at a tension that could not be kept up long without seriously affecting the health of the workers. On the other hand, the dull season means smaller earnings, if indeed any at all. In some factories, the straw works, the boot and shoe establishments, and the garment-making shops for example, the operators are expected to be on hand at the usual time until actually laid off. The day's work will depend upon the orders that have come in and sometimes the workers will wait for several hours before getting anything whatever to do, if they are not eventually sent home having wasted a whole morning. Piece workers and those who are paid by the hour seem to suffer more in this way than those receiving regular wages since the latter when the dull season comes are laid off for a definite time and may, with a certainty of regaining their position, take up some other work in the interim. In the straw works especially, where all the work is done by the piece, the beginning and end of the very short season is always ushered in by days of waiting in the factory for work that is not always forthcoming.

HOURS OF LABOR DAILY.

Classification.	Number.	Per cent.
11 hours per day or more	9	1.17
10½ hours per day	34	4.42
10 hours per day	589	76.59
9½ hours per day	13	1.69
9 hours per day	95	12.36
8½ hours per day	7	.91
8 hours or less	22	2.86
Total	769	100.00

It will be seen from this table that a ten hour day is the general rule in those industries employing women and girls and that the state law limiting the daily hours of labor for women to eight is so universally disregarded that it is little more than a dead letter on the statute books. Over three-fourths of the total number reporting put in a full ten hours and a few work even longer. In exact figures 589, or 76.59 per cent., work ten hours a day, 34, or 4.42 per cent., ten and one-half hours and 9, or 1.17 per cent., eleven hours and over. Only 22, or 2.86 per cent. enjoy the eight hour day.

In some of the industries covered in the investigation, such as the breweries and paper mills, double shifts are worked and wherever this is done half the force work from 12 to 13 hours a day. In the breweries this is only done in the summer when the plants are obliged to work day and night to keep up with their orders, but some of the paper mills are never closed down and the cutter hands and finishers often work all night. The strain is lessened by changing the shifts so that one week one set of girls works at night and the next week during the day. Overtime is required in many other factories during the busy season. The candy factories, for instance, run over time for almost two months before Christmas, the workers being on duty from 7 in the morning until 9 and even 10 o'clock at night. In the clothing factories the long periods of slack work are in a measure offset by the over-time required in other seasons. Such over-time means an increase in the earnings, of course, since piece workers turn out more work and those working by the hour or the day are paid extra, but it is the general opinion that it does not pay. Even most of the manufacturers

say that the fatigue point in women workers is reached at the end of ten hours and that over-time means work badly done and a weary set of workers for the following day. The few factories where an eight hour day was observed were governed by union rules, certain tobacco factories and book binderies being among these.

The length of the noon hour was not made a subject of special inquiry. It was found, however, that it varies according to locality. In Milwaukee and one or two of the larger cities of the state but half an hour is allowed and the girls eat in the shops the cold luncheons they bring with them. In smaller places a full hour is given so that the workers may go to their homes for a warm mid-day meal. In other shops forty-five minutes are allowed. Whatever the amount of time given at noon it is always deducted from the total working day. For example, when a half hour nooning is given the hours are usually from 7 to 12 and from 12:30 to 5:30. Where an hour is allowed work usually continues to 6 o'clock.

SANITARY CONDITION OF PLACE WHERE EMPLOYED.

Classification.	Number.	Per cent.
Good	425	55.27
Fair	314	40.83
Bad	30	3.90
Total	769	100.00

In endeavoring to arrive at the worker's personal opinion of the sanitary conditions of the places in which they were employed the difficulty arose from the fact that there was a general lack of knowledge as to what constituted a good or made a bad condition. In some instances specific complaints were made, but as a general rule the workers expressed themselves as well satisfied with their surroundings even when to the observer they seemed anything but satisfactory. For that reason the table is more interesting as showing the girls' own point of view than as a revelation of the actual state of affairs, though it is also true that taken as a whole the factories in Wisconsin where women are employed are above the average as to sanitary re-

quirements. Persistent work on the part of the factory inspection force and a gradual awakening of public sentiment that is finding reflex action in the manufacturers' endeavors to improve the surroundings of their employes have tended to improve a condition at no time probably so bad as in other places, if reports from those places are to be believed. The factories generally are fairly clean, reasonably well lighted and ventilated and equipped with modern and sanitary toilet conveniences. The reverse was often found, however. Many of the clothing factories in the city are located in buildings originally planned for stores and so badly lighted that most of the hands work by gas light all day. The rag sorting rooms are dusty and dirty and the same is true in lesser degree of other places. The enameling works are dusty and hot and the foundries are usually dirty and dark. In some of the larger buildings where a great many girls are at work the ventilation is sadly imperfect. Open windows mean draughts for those sitting near by and thus the workrooms go unaired throughout the day. In the breweries there is a great deal of steam and dampness and the same is true of the canning factories. The toilet arrangements are often inadequate and imperfect.

On the other hand a number of model factories are to be found, places in which every effort is being made to keep the surroundings of the workers as comfortable and healthful as possible. In many instances, it must be admitted, the sanitary conditions of the shop are infinitely better than the sanitary conditions of the homes from which the workers come. It must be acknowledged, also, that the average factory girl has an aversion to fresh air and does not always take advantage of what opportunities there may be for improving her immediate surroundings.

It will be noted that over one-half, or 55.27 per cent., report the sanitary conditions of their workplaces as good and 40.83 per cent. as fair, only 3.90 unqualifiedly condemning them.

OCCUPATION INJURIOUS TO HEALTH.

Classification.	Number.	Per cent.
Injurious to the health	137	17.82
Not injurious to health	632	82.18
Total	769	100.00

In pursuing the inquiry it became apparent that the general health of factory workers is about on a par with that of any other class. There were individual instances of the wan face, bent form and lack-luster eye of the poet's description, but such were the exception rather than the rule. The older workers—the women who had spent years in factory toil—almost invariably carried evidences of their long-continued drudgery in countenance or figure, but the younger girls, who after all constitute the great body of the workers, while not noticeably robust looking did not, as a class, appear to be in poor health. That the girls themselves are not inclined to regard their work as injurious to their health is shown by the fact that in response to an inquiry to that effect, 632, or 82.18 per cent., answered in the negative, while but 137, or 17.82 per cent., gave affirmative replies, indicating that whatever their physical condition might be the great proportion of the workers did not believe or at least were not willing to state openly that their occupation had in any way affected their health. The complaints that were made by the 137, who believed that their health had been impaired by their work, were varied. Garment workers and others engaged in tasks that required constant sitting complained of headache and constipation. The almost universal use of power machines has lessened the extent of pelvic troubles which formerly existed when machines were driven by foot power, but the women in the subcontractors' shops, which were not supplied with power of any sort except that furnished by human energy, were victims of a long list of ailments brought on from a constant running of heavy machines. In many of the garment factories the light is so poor that cases of impaired eyesight were frequent. Some of these places are so dark and so poorly fitted for the use to which they were being put that most of the sewers were obliged

to work almost the entire day by gas light. Moreover, the gas jets were not always shaded and the flickering light falling on the dark materials which were being handled made eye troubles easy to acquire and difficult to get rid of. Girls in the breweries complained of rheumatism and colds and also said that they were in constant danger of cutting themselves on broken bottles. In the knitting factories there was an occasional complaint of throat or lung trouble brought on, it was thought, by the flying fluff of woolen yarn. Complaint was also frequently made by this latter class of workers of badly adjusted tables and chairs, while in one case over 200 girls were without chairs altogether and were compelled to stand at their machines ten hours a day until through the efforts of this bureau the manufacturer finally put in stools. At this place, girls said it was not unusual for them to drop to the floor out of sheer weariness. There they would rest while their neighbors kept a wary eye for the foreman that when he approached they might give the signal. In other knitting factories, as well as in the candy factories and in other places where girls sat at their tasks the seats provided were often mere boxes turned on end or they were stools without backs. Those compelled to sit on such seats ten hours a day naturally complained of backache and their bent and in some cases actually deformed spines testified to the truth of their assertions. In the tin shops the girls often suffered from sore hands brought on by contact with the acid used in soldering. In the chair and toy shops girls said that the smell of varnish made them ill and some went further and laid throat and lung trouble to the constant inhalation of varnish fumes. In box factories and in paper mills girls not infrequently suffered mutilations from having their hands caught in the machinery. Girls who packed washing powder and lye worked in an atmosphere thick with flying particles, but said that they soon grew accustomed to it and did not notice its effect on eyes and throat. In the match factory where it was thought many cases of necrosis would be found the firm exercised so much precaution that there was little trouble on that score.

In general, the complaints were of dust, lack of air and excessive hours and it is safe to say that comparatively few places

were found that were free from one or all of these defects. Anaemia, the most common form of illness among factory workers is often due to such causes taken in connection with a lack of proper nourishment. In the larger cities few of the girls can go home to their midday meal but instead eat a cold lunch in the room where they have worked and in an atmosphere thick with dust and often foul with the exhalations of many workers. In seasons of over-time work, they eat a second meal of the same sort in the same surroundings, getting no warm food until 8 or 9 or 10 o'clock at night if they get it then, which is doubtful. In some factories gas stoves have been put in so that the girls can make fresh tea and coffee or warm that which they may have brought with them. In one or two instances hot soup and coffee are furnished free by the firm, but such cases are rare.

In suggesting ways in which factory conditions could be improved a longer noon hour affording an opportunity to go home for dinner was advocated by several, while others acknowledging the desirability of such a change declared that it would be impracticable except for such as lived within walking distance of their homes since the others could not afford the extra ten cents a day street car fare that would be necessary. Better light and air were asked for in many instances.

REASONS FOR CHOOSING PRESENT OCCUPATION.

Classification.	Number.	Per cent.
Pays me the best	120	15.60
The best place I can find	250	32.51
Because I like it best	161	20.94
Have evenings and Sundays free	238	30.95
Total	769	100.00

The question as to why these workers had chosen the factory in preference to other employments brought out the fact that the cause is to be found in the greater freedom found in an occupation, having its regular hours and duties, and leaving Sundays and evenings free of set tasks. That, expressed in various ways, was the reason given by 238, or 30.95 per cent., as the chief incentive for entering upon factory life, while 250, or 32.51 per

cent., explained that they were working where they were simply because it was the best place they could find. In 161 cases, or 20.94 per cent., the work itself was the most pleasing of any that had offered up to that time, while 120, or 15.60 per cent., advanced the very practical reason of better wages than could be commanded elsewhere. In informal discussion the workers rarely advanced any other reasons than these for taking up the special line of work at which they were found. Often the girl regarded it as a most temporary arrangement to be changed whenever inclination or an opportunity to do something else offered. Only in the trades where a high degree of skill was necessary in order to make fair wages and in which consequently a long term of semi-apprenticeship had to be served did girls regard themselves as members of a definite trade who could not and did not wish to move about from place to place.

IN CASE OF CHANGE WHAT OTHER OCCUPATION WOULD BE
PREFERRED.

Classification.	Number.	Per cent.
Dressmaking, sewing, etc.	264	34.33
Office work	86	11.18
Keep house	215	27.96
House work	49	6.37
Miscellaneous	155	20.16
Total	769	100.00

The ambitions of the factory girl, so far as her working career goes, are indicated in the preceding table which is based on the replies to the question: "In case of change what other occupation would you prefer?" It will be seen that dressmaking and sewing lead, 264, or 34.33 per cent. of the whole stating a preference for those occupations. This might be taken to indicate that days of unlovely toil do not eradicate an inherent feminine love for the needle and it may suggest to would-be philanthropists the sort of thing in which the factory class might be interested. That 215 or 27.96 are put down as preferring to "keep house" is not to be interpreted as a desire to take up housework as a calling, but to that other feminine instinct that finds its outlet in home duties. Many of the workers frankly stated

that they would prefer to be married that they might busy themselves with domestic work of their own. Forty-nine, or 6.37, declared that they would like to do housework, always, however, with the proviso "if wages were better" and the rest had varied ideals, ranging from the profession of a trained nurse to clerk-ing, stenography and teaching.

SHOWING NUMBER WHO PREFERRED THEIR PRESENT PLACES
TO HOUSEWORK.

Classification.	Number.	Per cent.
Prefer present place	720	93.63
Prefer housework	49	6.37
Total	769	100.00

REASONS FOR PREFERRING THEIR PRESENT OCCUPATIONS TO
HOUSEWORK.

Classification.	Number.	Per cent.
Because of better wages	91	11.83
More time to themselves	557	72.43
Can live at home	98	12.75
Miscellaneous reasons	23	2.99
Total	769	100.00

In view of the increasing complexity of the domestic service problem and the part that the factory girl plays in that complexity by her refusal to enter domestic service, it was deemed worth while to make a systematic attempt to arrive at her point of view and ascertain, if possible, the validity of the reasons that lie back of her undoubted aversion to housework as a calling. The question was bluntly put: "Do you prefer your present occupation to housework, and why?" Out of the 769 replies, forty-nine, or 6.37 per cent., indicated a preference to housework in itself but showed various causes why those replying did not engage in it. The other 720, of 93.63 per cent. of the whole, answered in the affirmative and were not backward in stating their reasons for doing so. This is shown by the first table, while the second gives, in broadly classified form, the reasons assigned. It will be noted that 557, or 72.43 per cent., base

their refusal to enter domestic service on the greater independence afforded by factory life, and that 98, or 12.75 per cent., prefer factory work because it enables them to live at home. Ninety-one, or 11.83 per cent., think the wages in factories better than those paid in housework, while the remaining 2.99 per cent. advance various reasons.

These replies have a significance to the student of social questions that make them worthy a more detailed consideration since they tend to show the attitude of the average working woman towards domestic service. In a great proportion of the schedules returned to the bureau, the "why," which follows the first question, is quite as laconically answered by the phrase, "Evenings and Sundays to myself." Recurring in one form and another it is this aspect that becomes most prominent, indicating that it is not what is so often given as the reason for girls' reluctance to enter domestic service—the menial nature of the tasks required and the consequent lowering of the individual's social position—but the very practical question of greater leisure for the worker.

"In the factory we have regular hours of work and regular things to do," say many of the girls. Various worded the same idea runs through five hundred of the schedules:

"I know what my hours are now. I never did when I did housework."

"Hours are better in factory work."

"In the factory one's work is done at six o'clock. In housework it is never done."

"No night work."

"Can go to church Sunday mornings and have evenings in which to see my friends."

"Factory work gives me more time off."

"Like a regular ten hour day."

"In factory work if you work evenings or Sundays you at least get extra pay."

Next to the question of leisure comes that of wages. The two are frequently combined. "Better pay and shorter hours" is a phrase familiar to the eyes in going over the schedules. This scarcely carries out the idea prevalent among employers of do-

mestic servants, who in figuring on the actual wage of the girl count in her board and lodging, and so hold that household work pays best. The girl, however, rarely takes either item into account, as living under her mother's roof she rarely pays a stipulated sum for her maintenance, either, as in the majority of cases, giving over her entire wages to her people or contributing what proportion of them she pleases. In any case, as Miss Addams in her recent work on "Democracy and Social Ethics" points out, the girl by working in a factory contributes towards the family's support in a greater degree than is possible when she does housework and lives away from home.

Many of the girls say that they prefer doing factory work because they can live at home. Often they add that by living at home it is possible for them to assist in the work there, thus relieving their mothers. What they do not say, but what may be implied since the average factory girl is not given to analyzing her reasons, is that life within the home brings the girl certain social pleasures that she misses entirely when her entire time is passed among strangers. Sometimes this is indicated by the remark, "Housework is too lonely" or "Don't like to live among strangers."

When a girl has expressed herself upon the social side of the two lines of employment she has not hesitated to do so somewhat vigorously. There seems to be a general feeling that mistresses are not so considerate as the man "boss," and more or less resentment toward them is shown. Something of this can be seen in the following replies:

"Any girl would like doing housework best if folks were always good to her."

"If ladies would give girls better rooms and kinder treatment and warmer beds and let them live more independently more girls would do housework."

"Many women who have hired girls don't know what a day's work is."

"Housework is healthy for girls, but good places are hard to find."

"There is more liberty in factory work and one is not looked down upon."

"Housework is slavery."

"A servant girl is never treated as a girl should be."

"I'd like housework in my own home."

"Don't like the way women treat their girls."

"Most girls who do housework are taken for regular slaves."

No doubt these are somewhat exaggerated statements, but they are interesting as indicating what the girls who refuse to do housework at any price say and think about it. In a few instances personal letters to the inspector were appended to the schedules, and in these the situation was thoroughly discussed. As in these cases the replies came from the better grade of factory workers they bear more than ordinary weight. One from a woman working in a paper mill for \$1 a day follows:

"Working women prefer factory work because a good mistress is rare. Women usually lack consideration about household duties themselves. They look upon the servant as a machine. Really, mistresses should know the daily duties of these servants, how long it takes for each task. I know of one house where one girl does the work for a family of six. She is expected to cook like a cook, do housework like a housemaid, dress and wait on table like a waitress, and all without the slightest help. Such conditions make girls leave housework and go into the mills."

Somewhat bitter in tone is this reply: "I love housework, but, with many other girls, I refuse to be thrust into someone's else kitchen to eat the family's leavings, nor in an attic to freeze in winter and swelter in summer. Besides women lower their girls by saying, 'My girl does this,' or 'My girl does that,' right before us, as if we had no feelings."

From the personal notes collected in the course of hundreds of interviews with factory girls it is easy to gather that the prevailing objection to housework is its irregularity of hours and tasks. Many girls, when a scheme of domestic work based on thoroughly business principles, with a regular working day and the privilege of leading one's life outside one's place of work as one pleased was broached, said instantly that in such a case housework would be preferable to most kinds of factory work. Often a girl frankly said that factory life gave her no preparation for a future career as a housekeeper, while housework

would train her for it. The workers, however, were frankly skeptical of any radical change coming about, and plainly regarded a proposition of business methods in the home as little short of absurd.

ARE MEN AS WELL AS WOMEN EMPLOYED IN YOUR OCCUPATION?

Classification.	Number.	Per cent.
Yes, both men and women	422	54.88
Only women	347	45.12
Total	769	100.00

This table shows the percentage of occupations in which men as well as women were engaged, the number reporting that they had men as fellow-workers being 422, or 54.88 per cent., while 347, or 45.12 per cent., were occupations in which only women were employed. It must be stated, however, that there is a likelihood that in some instances the question was misinterpreted so that the terms "occupation" and "trade" were confused, as while there were men in most of the factories visited they were rarely engaged in the same kind of work that was being done by the women. The heavier tasks fell to their share.

CAN MEN IN YOUR OCCUPATION DO MORE WORK IN A GIVEN TIME THAN WOMEN?

Classification.	Number.	Per cent.
Men can do more	350	45.51
Men cannot do more	419	54.49
Total	769	100.00

That the girls did not regard men as being able to do any more work in a given time than they could do themselves is shown by the preceding table which explains itself. Four hundred and nineteen, or 54.49 per cent., believe that women can accomplish just as much, while 350, or 45.51, do not.

ARE MEN PAID MORE THAN WOMEN IN THE SAME OCCUPATION?

Classification.	Number.	Per cent.
Men are paid more	364	47.33
Men are paid the same	405	52.67
Total	769	100.00

Where men were doing the same kind of work as that done by the girls, opinions as to their respective compensation differed. As will be seen from the table above, 364, or 47.33 per cent. of the girls questioned, believed that men were paid more for the same class of work, while 405, or 52.67 per cent., believed that they were not. In some kinds of work complaint was made that there was a discrimination in favor of the men who, while subjected to the same scale, were given the line that netted the larger profits. This was openly asserted in some of the cloak factories where men and women worked side by side but where the men were employed on garments in which there was a greater profit for the worker. In the glove factories men and women operating machines made about the same amount. Usually, where men were working with the women, they were engaged in quite different kinds of tasks. For instance, a man and woman were frequently found running a machine together, but the man tended the levers and saw to the feeding, while the girl or woman merely took care of the product as it came out. In the woolen mills men and women weavers made about the same wages.

PERSONAL OBSERVATIONS.

ARTIFICIAL FLOWER AND FEATHER FACTORY.

The making of artificial flowers and feathers gives employment to about forty girls in Milwaukee, where there is only one establishment of the kind. The work is of a nature requiring a long apprenticeship before any great degree of skill is acquired and is open to the objectionable feature of long periods of idleness and of a somewhat inadequate wage, even in the busy season. Still, it is employment in every way suited to women and those who become skilled workers make fairly good wages with less effort than in many other lines of industry. It takes about two seasons before a girl becomes a good worker. She starts in as a helper, steaming out feathers and doing odd jobs about the place. Then she is advanced to the coarser grades of feathers and flowers. The work is paid both by the week and by the piece, the best workers getting a stated wage, amounting usually to \$1 a day. These girls do the intricate flowers and feathers, the making of which is an art. Some are so complex of manufacture that the making of a single breast or blossom will consume a whole afternoon.

The girls were of a higher social type than those usually found in factories. Almost all had been through the ward schools and some were high school graduates. A few were daughters of well-to-do parents, working merely for pin money. The same objection was made to the business as that which is oftenest heard about the millinery trade. There are usually about three months of dull season a year, though three or four of the best workers find employment throughout the twelve months.

BAG FACTORY.

About one hundred girls in Milwaukee find employment in a factory which makes burlaps and muslin bags, such as are used

so largely in the milling trades and for handling produce. The bags are cut out by machines, operated by men, but the counting, folding, stitching, and turning are done by girls, and girls are also employed in the printing department where the bags are labeled. No great amount of skill is required for any part of the work, though a certain proficiency is necessary to turn out the large amount of work expected daily from the best hands. When the bags are cut they are given to girls who count and fold them into shape for the stitchers. After they are seamed up other girls cut them apart, look them over for slipped stitches and arrange them in orderly piles for shipment. The stitching is done on machines run by steam power, and while no great exertion is necessary the work requires constant attention. The girls who fold and count stand all day.

The most disagreeable feature of the work was the dust arising from the cutting machines. The air was filled with the light fluff coming from severed burlaps threads and all the girls wore caps to protect their hair and had exchanged their street clothes for cotton frocks. Some of them complained of throat trouble, but most of them said they suffered no inconvenience whatever. The foreman said that the firm expected to put in a new ventilating system before long which would almost entirely do away with the dust that must be disagreeable and irritating to the lungs.

The working hours are from 7 to 6, with an hour at noon and seven minutes for lunch at half past nine in the morning.

The wages ran from 60 cents to \$1 a day, few of the girls, however, making the last named figure excepting some of the fastest sewers. One girl said she had made \$1.75 the day previous to the visit of the inspector, having counted over 10,000 bags. She acknowledged that this did not happen often and that for the most part her earnings were far below that amount. Other girls said that they sometimes made as high at \$6.50 a week, but ordinarily they did not go above \$5. The ten girls reporting specifically averaged \$4.01 a week, the highest wage received by them being \$4.50 and the lowest \$3.60. None of these girls, however, were stitchers. The beginners were paid eight cents an hour.

BLIND FACTORY.

The sash, door and blind industry was included in this industry, not because of the large number of women who find employment in it, but because any are engaged in it at all. Most of such concerns restrict their working force to men and boys, but the one in question has been employing girls for twenty years past, having put them in at first, so the manager said, to refine the atmosphere of the workshops. In that respect the experiment has been a success, the presence of the girls, it was asserted, having aroused the latent chivalry in the men. What the effects on the girls themselves has been he did not say, though holding to the belief that the work was in every way suited to the sex. The tasks allotted to the girls consisted in finishing and wiring blinds and in putting the moulding into doors. The girls who worked on doors sawed the moulding into the requisite length, using a circular saw, and the girls who worked on blinds handled hammer and nails with all the skill of trained carpenters, at least disproving the theory that a mastery of such implements is beyond feminine skill. Some of the work, especially that with the saw, looked dangerous, but accidents, it was stated, were few. The factory itself was clean and airy, being in that respect far ahead of many of those where the presence of women workers is not unusual. The greatest objection to the work, aside from what might be deemed its unsuitability for women, was that it required constant standing, none of the workers being seated. The hours were ten a day, from 7 to 5:30, with half an hour at noon. All wages were paid by the day, running from 50 cents for beginners to \$.75 and \$1 for the girls who did the wiring. The weekly average for the ten girls reporting was \$4.86.

BOOK BINDERIES.

Between 300 and 400 girls are employed in the various book-binderies and printing offices of Milwaukee alone, while probably as many more find employment in similar establishments in the smaller towns about the state. Book binding is one of the pioneer industries offering work for women, a fact that may account for the small wages that prevail in it. Almost all the

work except the actual binding of the books is done by women, or girls, who fold, paste, sort, operate wire stitching machines, ruling machines, printing machines and punchers. Much of the work requires long practice to acquire anything like proficiency; but the rewards are very small. A forewoman of one establishment who has been in the business for years said that it was not a good one, considered from the financial point of view, but that the work was comparatively light and cleaner than many kinds of factory work, while in most binderies a nine-hour day is now the rule, owing to the influence of the unions to which the men belong. Few of the girls are in unions, however, though at one shop they said that they were grateful to the men for belonging since such affiliation had reduced the working week to fifty-four hours.

In the larger binderies improvements in machinery are to be noted. A circular revolving table on which sorting is done in one big shop permitted the girls to do their work seated, while formerly, and as is still the case in most shops, such work necessitated the girls being constantly on their feet. The wire stitchers sit at their tasks and their machines are run by steam power, but the girls who feed the presses and ruling machines usually stand.

Many of the shops were located on the upper floors of downtown buildings and where there was no elevator service the climbing of several flights of stairs twice or more times a day added to the fatigue occasioned by the work. In some instances the places were badly overcrowded and the sanitary conditions far from good, though others, located in modern buildings, were as nearly perfect as could be.

None of the girls did any of the actual book binding, that work being always done exclusively by men who were better paid. It apparently had never occurred to any of the girls to attempt learning the trade as a trade. A forewoman who was questioned seemed astonished that anyone should think book binding was woman's work. She admitted that it was no harder than much that is expected of women in factories, but said it was a "man's work." The manager of a large establishment, on the other hand, deplored the lack of ambition on the part of the girls.

The wages were low in every instance, running from \$1.75 to \$6 a week. In one place, where seventy-five girls were at work, it was stated that \$4 a week was a very good wage and beginners started in at \$1.75, the best hands not getting over \$6. At another establishment, employing fifty girls, the scale was put at \$3 to \$5. Girls who worked at folding by the piece made from \$3 to \$4 in a nine-hour day. Wire stitchers were the best paid, getting \$5. In a third bindery, a girl who had started at \$1 a week was, after two years of work, getting \$3.50 for feeding a ruling machine, a task that requires the exercise of a great deal of care and attention. The average for fifteen girls reporting was \$4.41.

BOX FACTORIES.

Under this head are included both those factories making pasteboard and those making wooden boxes,, though the work done by women in the two is entirely different. The pasteboard box factories employ large numbers of young girls who work in pairs, a little girl, fourteen or fifteen years old, being assistant to the girl who, though but a year or two older, perhaps, has arrived at the dignity of being a machine operator. The work is simple, and requires no great exertion, but is more than usually dangerous in the opportunities it offers for maiming hands grown careless at their task. The girl who operates the machine takes the box which has been cut and shaped and slips it on an iron mould. As this revolves she covers the box with paper which is reeled off by the machine. She must see that it is smoothly put on and that the corners are neatly fitted, before passing the box to the helper, who smooths down the corner pieces and piles up the boxes, keeping count of the number made. The helpers get one-fifth of the wages made by the machine operators and everything depends upon the harmony with which the pairs do their work. Other girls run folding machines and some do the more delicate work of putting on ornamental strips.

In one factory visited, over 200 girls, few of them over twenty years old, were employed. All the work was paid by the piece and wages ran from \$3 to \$5 a week. The highest and best paid worker, by her own statement, had never made more than

\$6.75 a week and she had been in the trade for years. The forewoman received \$4.50, but her wages can hardly be accepted as a criterion, as she had but recently been promoted from the ranks of the workers and, moreover, was herself under a foreman, her duties being merely to see that the girls kept steadily at their work. The hours were from 7 to 6, with half an hour at noon. Saturday half holidays are given during the summer. Lay-offs are the exception as the factory has steady work the year around.

A number of the girls had suffered from having their fingers crushed in the machines. One girl, who had lost the end of a forefinger, had been kept out of work five weeks by the accident, but the firm had paid her half wages during the time, besides meeting the surgeon's bill. She had returned to her place as soon as she was able to work, but some girls who had met with similar misfortunes had gone into other work. Many of the girls had been operating machines for years and had never had any trouble whatever.

In the wooden-box factory included in the report the experiment of using girls for work heretofore done by boys was being tried and with a success, so the superintendent said, that justified him in believing that it would not be long before other factories followed the same plan. Those who believe that even in factory life certain conventions are to be observed would be inclined to hope that his predictions will not be verified since the work itself as well as its environment is not the sort most suitable to women. It consisted in lifting boards from the cross-cut saw tables and carrying them to the rip-saw tables, where they were piled in even rows. One lot of girls stapled bundles of small boards ready for shipment. At the saws a girl and man worked together, the girl catching the boards as they came from the saw. Like other factories of the sort, the building was more or less open to the air and cold in spite of the strenuous efforts of several big stoves which kept the atmosphere torrid in their immediate vicinity but made little impression on the distance. No one complained of the cold, however, the workers being warmly clad and constantly in motion. To protect themselves from the flying sawdust the girls wore big aprons and caps, which were

provided by the firm. The noise of the machinery was deafening and that, in connection with the work itself and the barren surroundings, made the place seem thoroughly unsuitable for girls. The firm, however, was doing all that it could for them, the superintendent having given up his own office for their use at noon. Most of the girls had fathers or brothers working in the factory and did not apparently regard their work as an entire outsider might. . .

The hours were ten a day and the wages 50 and 55 cents. A girl who did stapling said that she preferred the work to housework at which she had been able to earn only \$1.50.

The average for the 22 girls reporting for the industry was \$3.42.

BRASS FOUNDRIES.

Girls are employed in brass foundries to run foot presses on lighter work, and at polishing and preparing goods for shipment. In the establishment visited, which is located in one of the smaller cities of the state, carriage and bicycle lamps and the brass fixtures for electric light globes are made and almost all the work is done by girls. In the busy season about one hundred are employed, but in dull times this number is reduced to thirty, who work at steady wages the year around. Some of the girls operated finishing machines which put the final polish on brass fixtures that had been shaped at the larger machines. The highest paid girl in the establishment made about \$1.25 a day by running a machine which trimmed the edges of pieces of brass. All the work was by the piece and wages ran from \$3.50 to \$6. No girls were employed at buffing. The pleasantest tasks about the place were those assigned the girls in the shipping rooms. These girls merely rubbed the fixtures and wrapped them in tissue paper to keep them from being scratched in handling. The average wage of the eight girls reporting was \$5.

BREWERIES.

The great breweries of Milwaukee employ several hundred women and girls who in the busy season work excessively long hours and at all times are paid meager wages, the work being of

so unskilled a character that it is easily learned, thus attracting a more or less unintelligent class. A large proportion of the workers are Polish. The work consists in washing bottles, putting on labels and tinfoil strips and in wrapping bottles for shipment. The bottles are filled, corked and the larger labels are put on by machinery, but the smaller labels about the necks of the bottles are affixed by hand, that work in the vernacular of the industry being known as "neck labeling." The youngest girls, those still in their early teens, are put at such tasks and are stationed in groups about each of the labeling machines where they catch the bottles as they come out, some putting on the neck labels and others the tin foil. In the tonic and malt extract departments, the large labels are put on by hand while the bottles are still warm from the brew. The older women do the washing and inspecting, working about great tanks of hot water and usually standing in water most of the time as the floors are always very wet. The bottles are washed on revolving spindles, one woman holding the bottle in place against the sponge until it is thoroughly cleansed and then passing it across the tank to another woman who rinses it in clear water and holds it up to the light to see that there are no cracks or defects in it. The clean bottles are then placed on trucks which are wheeled to the stacks, girls doing all this latter work. In one brewery where the superintendent said he did not consider bottle washing fit work for women, boys were employed at it but on the other hand at this same brewery the labeling machines were run by women, which was not the case in the other establishments.

The work is open to a great many objections. The breweries themselves are not always pleasant places to work in. In the bottle washing room the floor is usually covered with water and the girls wear wooden shoes both to keep their feet dry and to protect themselves from broken glass which in spite of frequent sweeping strews the floors. Bottles are constantly breaking in the hands and severe cuts are not unusual, though the girls do not make much complaint on that score. Colds, catarrh and rheumatism are common and one girl complained of the steam from the tanks affecting her eyes. In the summer the heat is disagreeable but at least one brewery has electric fans which modify the temperature.

Added to these drawbacks are the long hours which are required when the busy season begins. The ordinary hours are nine a day, from 7 to 12 and from 1 to 5, but when orders begin to pour in as the hot weather comes on a double shift is put on and the working day for each shift is lengthened. At the height of the season in some of the breweries the day shift goes on at 7 in the morning and works until 8 and 9 at night, while the night shift begins at 7 and works until 5 and sometimes until 6 in the morning. This is only when the breweries are running at their fullest capacity, however, but there is a good deal of complaint among both the girls and the men workers, as they assert that the amount of extra pay given them is insufficient for the work required. The girls get only three and four cents an hour extra pay, which is little more than enough to pay for the supper which is little more than enough to pay for the supper which they must bring with them. Not all the breweries run night shifts of girls, employing boys instead. All the breweries give a fifteen-minute lunch time in the middle of the morning.

Most of the breweries provide fairly good dressing rooms for their women employes, these rooms also being used for lunch-rooms. Several of them have separate lockers for each worker and tables and benches, the latter being a somewhat necessary provision since all the work is done standing and the girls are exhausted when the noon hour arrives. It is customary in most of the breweries to serve beer to all those who want it, a regular allowance being made. In one brewery every girl under sixteen is allowed half a pint of beer three times a day, while the women are given a full pint. In other breweries the beer is served in glasses to all who wish it. Not all the girls drink it, however. In one brewery care is taken to keep the men and girls separate, the girls being dismissed from their tasks some minutes before the men that they may leave the building while the latter are still at work.

The wage scale is uniform throughout. Girls at necklabeling and tinfoiling get forty-five and fifty cents a day and bottle washers sixty to seventy-five cents. In one brewery, the forewoman, a widow who had had twelve years' experience, was getting \$6. In this same brewery the girls who ran the labeling

machines made from \$3.50 to \$4.20 a week and the neck labelers \$3. Only four girls received as high as \$4.50 the year around. In another brewery the wages ran from \$2.75, which was paid the tinfoilers and neck labelers to \$4 for the bottle washers, the last named amount being the highest paid. At this place a woman who had been working in the brewery for five years received \$4 a week on which she supported herself and three children, paying 50 cents a week car fare as she lived several miles from the plant. This woman arises at 5 o'clock, does the housework and leaves her children with her mother who lives with her. By seven she is at her post and in summer does not get home until late in the evening.

Many of the brewery girls belong to a union which was formed recently with the intention of working for a reduction in the working day and a better wage scale. There was considerable agitation, but though they were supported by the men's union the girls did not gain recognition from the brewers though enjoying in part the concessions that were granted to the men.

CANDY FACTORIES.

In the five candy factories which were taken as fairly typical of an industry giving employment to large numbers of girls there were found over 450 workers, many of whom were little more than children. No effort was made to select factories representing either extreme as to conditions of work and some difficulty has been experienced in bringing the notes taken at the time of the various visits into a comprehensive story since while some of the places were far from attractive others were thoroughly modern in their appointments. As a general thing, it must be confessed that candy factories are not always inviting in appearance however tempting their output may be. Some of the finest grades of candy are made in dark and poorly ventilated basements and the very nature of the business requires extraordinary care if floors and walls are to be kept perfectly clean. There are features of the business, however, that are far worse than the surroundings. Wages are proverbially poor and no industry requires more over-time work. For almost two months before Christmas the factories are run until 8 and 9 and even until 10

o'clock at night to keep up to the orders that came in from all over the country. The somewhat pathetic spectacle of children toiling to make more fortunate children happy is then presented with a clearness from which there is no escape. The plants are adapted to only an ordinary output and when the rush season opens they are forced to run overtime or turn away valuable business. A great part of the work both of making the candy and preparing it for shipment is done by young girls in their teens and they are kept at work from 7 in the morning until 8 or 9 at night with only a brief time allowance for luncheon and supper. Sometimes the former is cut down and for the latter it often happens no regular time is given, the workers eating what remains from their noon meal as hastily as they can. The reports from the five factories show that in ordinary seasons the hours for most factories were from 7 to 12 and from 12:30 to 5:30, though some ran to 6 o'clock, but gave a full hour at noon. One factory's regular hours were from 7 to 12 and from 12:30 to 6. In rush seasons the hours were from 7 to 12 and from 12:30 to 8:30 and even 9 o'clock. In the dull season immediately following Christmas most of the workers are laid off though in one factory the working day is reduced to eight hours and the girls though paid less can still have regular employment if they desire it. The work required is varied in character and but little of it calls for the exercise of even a small degree of skill. The candy is made by men, but all the finishing touches are given by girls who dip creams and chocolates, wrap caramels, fill packages, pails and boxes, wire candy cherries and put "all day suckers" on sticks of licorice. The chocolate dippers make the best wages and do the work requiring the greatest skill. It takes some months to acquire the dexterity necessary to being a skilled dipper. In one factory the finest chocolates were dipped in a small, completely enclosed room in the basement, the temperature of which was kept at 90 degrees. It was explained that this was necessary to keep the chocolate at the right consistency. The air in the room was not only hot but bad and the girls complained of headaches, though they said they soon became accustomed to it. In other factories the chocolate dippers worked over pans placed either in hot water or kept warm by

gas jets beneath, and were fairly comfortable. In some of the factories only the chocolate and bon bon dippers were seated at their work and these sat on wooden boxes. The rest stood. In the cracker department of one factory the girls were obliged to lift and carry about large boxes filled with crackers and cakes.

The wages were small, except in a few cases of forewomen. In all but one of the five factories the work was done by the piece and for the 53 individuals reporting the scale ran from \$2 to \$8; the average being \$4.20 which seems rather high for the whole since in all the factories visited the scale as reported by the managers and superintendents themselves ran from \$1.75 to \$6, never going over the figure, while one or two placed it at \$5. The difference may be accounted for on the ground that the superintendents did not take the wages of the forewoman into consideration while in the table from which the average given was made eight forewomen whose wages ran from \$4.50 to \$8 a week are represented. Even the average forewoman in the average candy factory does not, however, receive large wages. One in charge of the department where the finest grade of chocolate bon bons was made and upon whom fell constantly the responsibility for hundreds of dollars worth of goods was getting only \$4.50 a week, though she had been with the firm eight years. The wages for workers were even lower. Extracts from notes made at the time are illustrative and are quoted unchanged:

"The wages, according to the girls' own story, are miserable—starting at \$2.25 a week and rising to \$4, the forewoman in charge of the candy packing and chocolate dipping room getting but \$4.50. Questioned uniformly, the girls stated they were getting \$2.75 and \$3 and all complained of low wages.

"The girls made from \$1.75 to \$5 a week, the latter wages going to the very best class of workers, forewomen getting from \$4.50 to \$7.

"Girls are started at \$2 a week and can work up to \$5, but most of them rarely make over \$4. In talking with the girls this was evident. Girls who had been with the firm five and seven years were getting but \$3.50.

One factory counted three evenings of over time as a full day,

another gave half a day's pay for each night the force worked, and two paid for six evenings with two full days' pay. In any case the total weekly earnings were so low that the extra amount did not, in the girls' opinion, compensate for the great fatigue occasioned by the double work. In three of the factories all the workers except those just beginning were paid by the piece. In one the wages were by the week, and in the fifth the task system was followed and the girls were expected to do a certain amount of work in a given time. When they failed to do it their wages were cut, but on the other hand if they turned out more work than was set by the limits of the task, they were paid extra. The result, it was explained, was to put girls on their mettle. It was quite apparent that they worked with feverish haste, quite different from that pursued in the single factory where wages were paid by the week and the girls were discovered singing over their work.

Most of the workers are in their teens. Older women do not stay in the business on account of the low wages.

CASKET FACTORIES.

An occupation which seems gruesome on its face but which really has much to recommend it to women is the finishing of caskets and the making of mortuary robes such as are supplied to the undertaking trade. All the fancy silk linings put into the modern coffin are made by girls, and usually girls not only make them but cut, fit and tack them into place, while other girls cover the outside of the caskets with cloth and do the glazing. In one of the factories visited all the work except that of making the linings was done by men, the manager evidently being an unbeliever in a woman's ability to handle a hammer and nails. In the last named place, girls were employed only in the robe department, which in appearance was more like a dressmaking shop than a factory. Even the presence of fashion magazines from which the robes were copied carried out the illusion. Few of the workers except the forewomen were experienced dress-makers, most of them being girls who knew but little about sewing and found it easy to work where less accuracy of fit and

detail was necessary than would have been required of them in a dressmaking shop.

The wages were not high, ranging from 70 to 85 cents a day for those working on the caskets and about the same in the robe department, though in the latter place good workers could make \$1 a day as all the work was by the piece. Lining makers averaged about 85 cents. In the other factory, where eight girls worked in a pleasant sewing room, wages ran from \$3 to \$7, most of the workers getting \$5 and the forewoman \$10.50.

CHAIR FACTORIES.

In the great chair factories, which form an industry somewhat peculiar to Wisconsin, many girls are employed to do the varnishing and what is known in the business as "papering"—that is, covering the chairs with stout paper so that they shall not be marred in shipment. Most of the factories are located in Sheboygan and Port Washington, two places which have been largely settled by Germans, and almost without exception the workers in these establishments are of that nationality. In an Oshkosh factory, which combines chair making with another line of business, this was not so marked, but it is safe to say that most girls who make their living by varnishing are of foreign parentage or foreign born themselves, the work having little to make it appeal to others, whose better education or higher intellectual equipment would make it possible for them to secure employment better suited to their sex.

Neither the work nor the surroundings are attractive, even in the best factories, while in the poorer ones it is little short of being repulsive. It takes exceptional care to keep the worker from covering her face, hands and clothing with varnish, as in her eagerness to make as high wages as possible she wields her brush with more vigor than nicety. In one factory the girls worked at the dipping vats, and were covered with varnish from head to foot, but this was the only factory in which girls were permitted to do anything but hand work, in which it is possible to keep much cleaner and which is neither so dangerous nor exhausting. In hand work the girls varnish chairs which are placed on low

tables, boys being employed to fetch and carry them away as they are completed. All the work was done standing. The deftness with which the girls applied smooth, even coats of varnish was remarkable. All the finest furniture made by the factories was entrusted to them, men doing the coarser dipping. In these factories it was not necessary for the girls to lift heavy chairs, but in the one where girls worked at the vats they were found lifting pieces that seemed to be much too heavy for their strength. The work is said to be unhealthful, but it was difficult to get any definite statements in regard to that. It was stated that varnishers are liable to consumption and throat troubles from constantly inhaling the fumes of varnish, but this was denied by those who had worked for years at the trade without noticing any ill effects. What the girls did complain of was difficulty in washing their hands and faces free from the stuff. They used benzine for the purpose, and between the two things said that their skin was kept in a state of constant irritation, a fact borne out by the rough complexions of some of the workers. One girl complained that the varnish made her dizzy, affecting her head in a way she did not seem able to explain but which would seem to indicate that at times workers are overcome by the fumes.

The girls who did the papering were younger, poorer paid, but had pleasanter work, as all they were required to do was to wrap chairs in paper, tying it with stout twine.

The wages were low but uniform throughout the chair factory district, being fixed by agreement among the manufacturers. Girls in the papering department were paid 35 and 40 cents a day and varnishers 65 to 75 cents. There was no piece work, but the task system prevails, so that the girls work at the highest rate of speed for the most part. In the Oshkosh factory a few girls who worked by the piece could sometimes make as much as 90 cents a day, and a girl who did stenciling in colors was paid \$1.25 a day. The rest made from 40 to 65 cents.

The hours were ten a day, factories beginning work at 7 o'clock, with forty minutes for noon and an hour off on Saturday afternoons. Most of the factories conformed to this schedule.

In discussing the industry as it affects women, a manufacturer who employs a large number of girls said that he did not consider it suitable labor for them, but that he had been forced to put them in because they could be had at cheaper wages than men and the great competition in the business required the factory to keep its expenses down as much as possible. Then, too, girls were more conscientious than boys and did better work, once they were trained. Some of the factories had been employing girls for a great many years. In one, which put them in over twenty-five years ago, girls now employed are daughters of mothers who once worked for the same firm, so that it might be said they were literally born into the work.

Taken as a class, the varnishers were not reported to be ambitious. As a rule they had little education, having gone to work in the factory as soon as the law would permit them to do so. Few of them patronized the public libraries, and a night school in which sewing and cooking were taught for several years did not prove successful and was given up. The custom of minor workers turning over the entire wage to their parents prevailed throughout, and even workers past their majority had no control of their wages.

A side industry, connected with the chair factories, is the making of cane seats. Such work is done in the homes and so it comes about that in these communities whole families work for a chair factory, the father and elder boys and girls in the factory, the mother and young children doing caning at home. Many of the girls interviewed had been varnishing chairs for five and six and even seven years, and professed to like the work as well as any that was obtainable.

CIGAR BOX MAKING.

Girls in cigar box factories are mostly employed in lining and decorating boxes, though in some establishments they do the sorting and run the machines on which the boxes are made. Girls also work in the printing departments where the labels are turned out. In fact, few men are employed in such places except in the wood-cutting department. Owing to the light material used in making the boxes none of the work is very

heavy and much of it, such as the lining and decorating, seems well suited to girls, who acquire considerable deftness in fitting in the paper and putting it on smoothly. The only work that would seem to be in any way exhausting is that done on the machines, which are operated by foot power.

All the work in the places visited was paid by the piece and wages run from 40 cents, which the youngest and least experienced girls are paid for sorting wood and running errands, to 90 cents, which the machine girls made. Few even of the best workers were able to make \$1 a day. Girls who did decorating made about \$5 a week. An exceptional worker was making \$25 a month, but she could turn out a great deal more work than anyone else in the place. In one factory a woman who had been working for the same firm for twenty-one years was making \$5.40 a week and supported a mother on that slender wage. Added to the drawback of small wages the business is liable to some fluctuations, and while shut-downs are infrequent the workers lose a good deal of time in the factory through slack work. The lightness and ease with which most of the work is done are its chief recommendations.

CIGAR MAKING.

The making of cigars is one of the oldest trades in which women have found employment. Some element of romance seems to have clung to it, poets having endowed the cigarmaker with a traditional beauty, but there is nothing in either the work itself nor the surroundings in which it is carried on today that would tend to confirm such a view. It is true, however, that as in the higher grades cigar making is a skilled trade, the workers are usually above the average intelligence of the factory class. Many of them have grown old in the service of one firm, and there are almost as many gray heads bending over the tables on which the cigars are made as there are young ones. Such length of service is possible because of the early age at which girls sometimes begin such work. They are started at stripping tobacco. In the large factory in which most of the facts for this part of the report were gained, there were fifty of

these little girls, huddled together on low benches in one end of the work-room, stripping the stems from and smoothing out leaves of tobacco. From the ranks of the strippers they were presently advanced to the department in which the cigars were stamped and labeled, and gradually they worked their way up to the cigar-making department and learned the knack of putting a cigar together.

The wages varied according to the work done. Strippers were paid \$2 and \$2.50 a week, and the girls who did the labeling and stamping, \$2.50 and \$3. The cigar makers worked by the piece and made from \$5 to \$9, according to their skill and the quality of the work given them to do. One woman made \$10 a week regularly, but was accounted the best worker in the place. She was the only one who was paid that amount. Others said that they averaged about \$1 a day. It took two or three years of practice to reach that figure, however, and then one was not always sure of making steady wages.

The eight-hour day was strictly observed, though occasionally overtime work was necessary. Ordinarily the factory opened at 7:30 and closed at 4:45, with an hour and a quarter at noon and Saturday half holidays the year around. The factory was clean, well ventilated and with good light, while the sanitary arrangements were better than the average.

In speaking of the ability of women workers, the manager of the factory said that the firm had not always employed them. As a matter of fact, men were to be preferred, but in a strike over twenty years ago the men walked out leaving the firm in the lurch. Then the firm began to impress women into the work and within a year had trained a great many, so that when the men, tiring of the strike, tried to come back they found their places filled. At that time boys were employed to do stripping, but they struck, too, and little girls were hired in their places. The firm had proved that women and girls did just as good work and were more reliable. It was true that in the finer grades of cigar making men still did the best work, but for the ordinary lines women did just as well. Their earnings were not so high, however.

CLOTHING FACTORIES.

Under the general head of clothing it has been deemed best to include all the information gathered in a dozen different establishments variously manufacturing shirts, overalls, women's underwear, duck coats and trousers, rather than take up separately each division of the industry. In this department's report on sweating, which appears in the present volume, can be found many facts that would come under the scope of any investigation of the entire clothing trade, and those who may care for a more detailed account of the conditions under which such work is carried on are referred to it. Here it is possible to consider only certain general characteristics of the factories visited, and though it is probable that the establishments in question very fairly represent the general status of the business, as it is carried on in factories, the special investigation of sweat shops touched also upon the factories and gave opportunity for a closer study than this general inquiry permitted.

It was found that in twelve factories visited, all but three of which were located in Milwaukee, conditions of employment varied greatly, though the wage in the several divisions was about uniform. The factory buildings themselves ranged from the thoroughly modern, perfectly equipped structure on the outskirts of the city where every convenience was provided for the workers, to the dark, dingy room in the heart of town, a room never intended for factory purposes in all probability, and illy adapted to them in any event. In some of the places of this last class the operatives sometimes were obliged to work all day by gas light, the room being lighted only by windows at one end, the other end being used for office purposes. Added to this what few windows there were, were not always kept clean enough to let the light come through. In one instance, where thirty-five girls were making overalls in a long narrow room, the windows at one end of the room were boarded half way up and had been in that condition for some months. In this particular place, which, it must be stated, was one of the worst, the only operatives who could get along without artificial light even on sunny days were those working near the windows. The others

worked under flickering gas jets. Not a light in the workroom was shaded and the girls complained that after a day spent in sewing dark cloth their eyes gave them a great deal of discomfort. The same complaint was made at other factories where a great deal of work was done in artificial light and no provision was made to shade or steady the flickering gas flames. Frequent complaint was made, too, of lack of ventilation. In many factories of the sort described, opening the windows was the only way in which the workroom could be aired and to this the girls whose machines were nearest the windows objected on account of the danger of taking cold. In some places, too, storm windows were put on early in the fall and this made it almost impossible to let in a sufficient amount of fresh air. Such factories were quite as numerous as the modern ones, in which every workroom had windows on at least two sides, if not on three as was the case in one model building. Often in addition ventilating systems were in use in these factories.

In none of the factories visited was any of the work done by foot power, all the machines being run by electricity or steam. Only in the small concerns, coming under the head of sweat-shops and not included in this report, were the operatives compelled to run their machines by foot power. All the work was done seated. Some of the workers complained that their chairs were not always properly adjusted to the height of the table, but usually that seemed a matter easy to remedy for foremen and managers professed to be ready to raise or lower seats to suit the workers.

The hours required each day varied in different factories. In the one union shop visited the eight hour day was strictly observed. Others ran nine and ten hours. Two ran from 7 to 6, with an hour at noon; three from 7:30 to 6, with an hour at noon; three from 7 to 5:45, with three-quarters of an hour at noon; one from 7:30 to 5:45, with an hour at noon; one from 8 to 6, with an hour at noon; one from 7:15 to 6, with an hour at noon. In many places there was little discipline so far as regularity of hours was concerned and girls came and went about as they liked. In the busy seasons the managers of the factories did everything they could to keep girls at their ma-

chines not only the full time, but over time also, but did not always succeed as well as they could wish. On the other hand, there were establishments in which the most rigid methods were followed and operatives were obliged to be at their machines at the moment power started or suffer fines for their lack of punctuality. In one place, the superintendent complained that even in the rush season it was impossible to get the operatives down to business on time and in consequence much overtime was required that could have been lessened by beginning work earlier in the day. Workers themselves admitted that they often did not come to the factory before half past eight and left before six in the evening. They could see no reason why they should not do so so long as they were working by piece. There is, however, comparatively little of such dawdling, for the earnings of piece workers are not so high that many care to reduce them through their own fault. In one factory slack work had lessened the working day to eight hours and the girls were making such small wages that they were bitterly discontented. Saturday afternoons, in most shops which granted such concessions, were earned by working extra time on the other five days of the week. In almost every branch of the industry there were periods when overtime work was required, but these were usually off-set by dull seasons when work fell off, if the factory did not temporarily close down. Managers, as a rule, were opposed to overtime, believing that it lowered the standard of work. Under the conditions regulating the business it seems difficult to avoid it.

There was the greatest variety in wages, but it is safe to say that the average was below \$1 a day. There were plenty of instances of workers who earned more, but there was still a greater number who earned less. The younger girls who took out bastings, ran errands and made themselves generally useful, started at \$2 or \$3 and learned the trade by degrees. In a factory making overalls and shirts, piece workers made from \$4 to \$9 a week, inspectors being paid \$7 and \$7.50. The average was about \$5. In a cloak factory wages ran from \$6 to \$12, but lost from six weeks to three months every year. Another shirt and overall factory wages ranged from \$5 to \$6, girls being started

on general work at \$3. Good workers could make \$8 and even \$10, by having plenty of work and pursuing it diligently. In two underwear factories the wages were from \$3 to \$7 a week, only a few being paid the latter figure. A girl running a hem-stitching machine made 50 cents a day. A girl sewing lace on muslin ruffling made the same amount. In a factory making silk waists and petticoats the average for twenty-four girls was \$6.25 a week. This included a forewoman who was paid \$12 a week, as well as girls making only \$3. The scale for operatives ran from \$4 to \$8. The average in an overall factory for thirty-five girls was \$5.40, the scale running from \$4 to \$9. In the union shop, before referred to, workers said they could make as high as \$10 and \$12, when conditions were just right, but as they rarely were their wages fell far below that amount.

Individual instances may be of interest. A deaf mute making overalls averaged about \$5 a week and had managed to save \$500 in five years. She, however, lived at home and denied herself everything in the way of clothes except those absolutely necessary. A girl who picked out bastings was paid \$3. A woman running a buttonhole machine had formerly worked in a photographer's studio as a retoucher, but her eyes gave out and she was content to make \$6 a week in her present occupation. An overall maker made \$5 and \$6 a week and remained at home one afternoon every week to assist her mother in the family washing. A girl making shirts had formerly worked in a fashionable dressmaking shop at \$5 a week and was now making \$8. A shirt maker who had succeeded to the position of forewoman after eight years of experience, said that she had been able to make \$6 a week when she had a machine, but that few shirt makers could average \$1 a day nowadays. Buttonhole operators in that factory received but \$4.50 a week.

In explaining how he fixed a scale for work, the manager of a large factory employing nearly 200 girls, said that he selected six girls haphazard, making sure that some were swift workers and that others were in the slower class. To each of these he gave the same amount of work to do, paying them by the day for the time employed upon it. Then he kept strict account of the amount of work done by each and struck an average from the

total. He declared that it was not true that the scale was adjusted to the best worker as is so often charged. Old hands who knew what he had in mind when he started out to fix a scale would often try to take advantage of him and work as slowly as possible in order to have the scale fixed low. He told of an instance where an experienced hand, called in to assist in adjusting the scale for some new work, earned exactly fifteen and three-quarters cents in three and one-half hours, while another girl, newer in the business, who did not realize his motive in having her do the work, made twenty cents an hour from the start.

In the cloak factories the girls complained that the scale had steadily declined of recent years. A woman who had been making cloaks for twenty years said it was impossible for her to earn as much today as she did formerly. She was inclined to attribute this to the fact that men were being employed to do the class of work formerly given women. Wherever men were employed in cloak factories they were given the harder, but the better paid grade of work and were able to make much more than the women. In one factory it was stated that while the girls could make from \$6 to \$12 at the highest, the men were making from \$18 to \$25. Two shirt makers of more than ordinary intelligence for their class said that in many factories of which they knew personally there was a definite limit set to a woman's wage earning capacity and no matter how good an operator she might be, if she went much over the \$1-a-day mark in one way or another, either through a readjustment of the scale or by changing her work, she was kept within the amount deemed enough for a woman to make. Frequently these workers said a woman was afraid to do all that she could because she felt that if she did her wage would fall. Another side of the question which came out in these discussions concerned the feverish haste in which the poorer workers are obliged to toil if they would earn anything at all. Under the scale, it was asserted, it was impossible for the best workers to make fairly good incomes without overworking, but it was quite impossible for the slower hands to do so without a tremendous expenditure of nervous energy.

The proprietors and managers took quite another view. They said that wages in Wisconsin were much better than they were in the east, while the grade of workers was not nearly so good. Experienced hands were always able to get good jobs. The trouble with western help was that much of it was inexperienced and needed training. In citing the difference that exists between eastern and western factories, so far as the treatment of operatives go, one manager told of a certain eastern firm which does not allow its help to wear laced shoes as it has figured out that a worker loses a certain amount of time by attending to refractory shoe laces in working hours.

It was also stated that western houses are obliged to compete with eastern sweatshop goods and the competition is so great that it is impossible for them to pay any more than they do without running the risk of loss.

It was difficult to get at anything like the real facts regarding the effect of such work upon the workers. There were general complaints of failing vision caused by defective light and constant work, of rectal troubles brought on by constant sitting, of anaemia and general ill health from close confinement. Usually, however, there was a prompt denial of any inference that would tend to show that the clothing trade is unhealthful, and it is quite true that women who have been in it for a great many years do not seem to be much worse off than women of their same station in life whose lives are spent in the kitchen. One thing was noticeable, however. That was the general failure of such workers to sit properly. Almost every woman had the round shoulders and the bent back that come from continued sitting in wrong positions. At noon, when they might go for a walk in the fresh air, the workers seldom do so, and instead eat their luncheons at their machines. "It is too much trouble to dress up", was their usual reply to a query as to why they did not take advantage of what opportunity they had of getting needed exercise and change of air.

CORE MAKING.

Accustomed as the investigator of social conditions becomes, in time, to seeing women doing strange work in strange places, it is always with more or less of a shock that he finds them in foundries, the best of which must, in the very nature of things, seem wholly unsuited to the sex. Nevertheless, in certain kinds of foundry work women, or to be more particular, girls have made a distinct place for themselves, ousting the boys who formerly occupied it through no other means apparently than by being more conscientious and painstaking. In two of the large brass foundries in Milwaukee some seventy girls in all are employed at what is known as core-making, a very important and essential phase of foundry work. It consists in making the sand cores for castings, a task requiring absolute accuracy in following the model and a certain delicacy of touch that it is said girls have in greater measure than did their predecessors in the work. Each girl works with a little heap of sand, mixed with rosin before her, out of which she moulds the core, using a metal mold for the purpose. Part of the work depends upon her accuracy of sight and deftness of touch, as it consists in drawing certain lines and indentations in the wet sand which, when reversed in the casting, become all important in the strength and durability of the completed piece.

The worst features of the work are the bare, uncomfortable, dirty surroundings. The girls inevitably get themselves covered with the greasy sand and present anything but an attractive appearance, while the rooms in which they are stationed are not pleasant places. In one shop every effort is made to safeguard the girls morally. They have a separate entrance to their workroom and are sent home ten minutes earlier in the afternoon and come ten minutes later in the morning so that they have no need of meeting any of the men working in the establishment, none of whom are permitted to enter the room where the girls are employed. Girls who go home to their midday meal are also dismissed before the noon whistle blows. In this respect the foundry is some steps in advance of other places where both sexes are employed, and in

which there are seldom any restrictions as to their meeting. The firm referred to has been employing girls for about nine years. Before that cores were made by boys, who were usually hired at that irresponsible age of boyhood when it is impossible to tie lads down to any regularity of life, and in which a conscience, as applied to the task in hand, has not been well developed. The experiment of filling their places with girls proved so successful that the foundry has kept them ever since and other foundries have followed its example. While unpleasant in some respects, it must be said that core-making is not more so than many other lines of work in which women and girls are engaged. The wages ran from \$2 to \$5.50, only the most expert workers receiving the latter figure. Beginners were started at \$2 and \$2.25 and worked up gradually, the most skilled, after some years of experience, being paid from \$4 to \$5. The hours were from 7 to 5:30, with half an hour at noon.

A few girls were employed in the shipping rooms of both places to pack brass and nickle fixtures for shipment.

COTTON BATTEN MILL.

The greatest difficulty was experienced in getting information at this mill, which is located in one of the smaller cities in the state and which has recently been affected by a strike. The managers refused to discuss the situation and the workers were either reluctant or afraid to do so. Two objectionable features of the work were speedily discovered. One was the length of the working day, which although reduced by the strike from the eleven hours heretofore demanded, to ten and a half is still longer than that in vogue elsewhere, as work begins at 6:30 and continues to 12 and then runs from 12:50 to 6 p. m. The ten minutes taken from the noon hour makes up for an hour less of work on Saturdays, when the mill closes down at 5 instead of 6. The other drawback was found in the work itself, as in addition to the fatigue occasioned by long standing at the reels and jennies, the workers were exposed to an air thick with flying cotton. One's own clothes and hair were so thickly covered with lint in

the course of even a short inspection that it seemed reasonable to conclude that day after day of breathing in such an atmosphere must have a bad effect on the lungs and throat.

The girls were employed in running spinning jennies and reeling machines and in packing the rolls of cotton batten as they came from the reels. Each girl had a long row of spindles to look after and none of them was able to sit down to her task. Wages, from statements made in the factory, ran from \$5 to \$10 a week, but this was disputed by other working girls in the same town who said that the cotton batten mill workers were lucky when they made \$1 per day. There was no way of verifying either statement, both of which are here presented for what they are worth.

DYEING AND DRY CLEANING SHOPS.

Women find a variety of occupations in the dyeing and dry cleaning establishments. The one selected for inspection was a comfortable place as factories go, with abundant air and good light. Some fifty girls in all were employed. A dozen worked in the tailoring department where garments were renovated. Another set were engaged in taking out stains by chemical processes. Other girls did pressing both by hand and by steam rollers. One who had worked at a large roller for six years, being constantly enveloped in a cloud of steam, said that she did not notice any effect on her health except that she caught cold easily. She had been told that the steam would affect her eyes, but did not find this to be the case. Other girls made buttons, did accordion pleating with a machine that was operated by hand, pressed elaborate party dresses, resealed the carpets sent in to be cleaned, re-curved ostrich feathers and did a number of other things, the work apparently being free from the monotony that is customary in most factories.

Wages ran from \$2.50 to \$8. The forewoman was getting the maximum figure, \$8, after having served the firm fourteen years and being in full charge of the pressing and renovating departments. She thought the salary low but said that she was never docked for days absent and had a two weeks' vacation with pay every year. The other girls had no such favors.

She had once done housework but looked back upon it with horror, saying that she was not treated right and that she had been obliged to work from early in the morning until late at night for a mere pittance. The pressers were paid from \$3.50 to \$6, according to their skill. The carpet sewers were paid \$5 and \$6, and the girls running special machines about the same.

An electric ventilator in the pressing room kept the air fresh and cool and there was plenty of light.

ENAMEL WARE FACTORIES.

The increasing demand for enameled ware in household utensils has created a distinct line of work for women, several hundred of whom,—many mere girls in their teens,—find employment in the several factories of the sort in the state. Some of these are large tinware factories of which the enameling works are only a department, but others are devoted entirely to enameling, and in either case the two kinds of work are so distinct in character that it had been thought best to consider them separately. The work of enameling consists in coating utensils of cast iron with a certain metallic preparation which, when exposed to intense heat, becomes as hard as porcelain. This preparation is applied either by dipping or with the brush. The girls stand at vats filled with enamel of various colors, into which they dip the piece to be covered, holding it with a long pair of pincers. The only skill required is a certain trick of so shaking off the surplus enamel that the piece shall be evenly and smoothly covered. This takes considerable muscular effort, as well as a certain deftness which not all girls seem able to attain, since not every girl can become a first class enameler. The mottled ware is made in another way. A utensil already covered with plain enamel is held by the pincers in one hand, while the girl with the other hand lightly flecks it over with enamel of a contrasting color, dashing it on with sharp, quick movements of a whisk broom. Special care has to be taken to cover the edges and joints neatly and to keep the inside clean. The enamel is not dirty, is easily removed from the hands and face, and does not ruin clothing, though the workers wear enveloping aprons to pro-

tect their gowns. In a dry state the enamel is a fine, light powder, easily blown about, and all enamel workers complain of the dust that filters into the lungs and throat.

Worse than this, however, is the intense heat noticeable in all the enameling works. The great ovens in which the ware is fired adjoin, if they are not actually in the room where the enameling is done, and in spite of funnels arranged to carry off as much of the heat as possible, the atmosphere becomes fairly torrid at times. Combined with the dust it makes such places most disagreeable and uncomfortable to work in. Girls are frequently overcome by the heat in summer when the workrooms become unbearable. At times it is found necessary to close down the entire plant on account of the heat. An intelligent forewoman in one of the factories suggested putting in electric fans, which would certainly tend to improve conditions and would not be so great an expense that they could not easily be afforded.

Still a third drawback to the work is the fact that it has to be done standing. Girls can not well sit at the vats. They complained of great weariness on that account, but said that the work was preferable to much that is done in factories and paid about as well as any.

Wages varied according to the factory. In one the enamelers were paid \$4 a week. In another, where the piece system was followed, they could make up to \$5 by diligent work. In a third the wage ran from \$3 to \$4.50 a week, according to the skill of the worker. The hours were ten a day throughout. In one place girls who worked a full week were given half a day's extra pay as a reward.

ENVELOPE FACTORY.

The work required of the girls in the envelope factory visited was purely mechanical. The larger portion of it was done on machines which required nothing more than to be fed as they cut, folded, gummed and counted envelopes. All that the girls did was to feed the paper in and take care of the envelopes as they came out, doing them up in bundles and putting them into

boxes. This last work was regulated to the speed of the machine and an astonishing number of boxes can be packed by a girl in one day. Ten girls were engaged in folding and gumming special makes of envelopes, and there were about twenty little girls who ran errands for the machine operators, bringing the material and taking away the envelopes.

The factory was clean and well ventilated, but overcrowded, the machines being placed very close together. The greatest objection that could be raised to the work was the nervous strain caused by the incessant noise and the effort of keeping up to the machine. The only really dangerous work was that being done by the girl who cut the paper bands for the envelope bundles. She used a long knife fastened in a hinge, a wicked-looking tool, but the girl asserted that she had never cut herself and that no one else using it had ever done so. All the machine work was done sitting and the girls had chairs instead of the usual uncomfortable stools.

The hours were from 7 to 6, with an hour at noon and Saturday half holidays through the summer. There was no overtime. Wages ran from \$4 to \$6 a week for the machine operators, the errand girls getting \$2 and \$2.50.

FLY NETS AND HAMMOCKS.

Practically all the work of making leather fly nets is done by young girls in dark and unpleasant factories. The work, if not so arduous as some that is given women to do, has certain unpleasant features, entailing apparently an inevitable and most unfeminine state of griminess and dirt. Of the two places of the sort visited during the course of the investigation, one was given over entirely to the manufacture of fly nets, while the other combined that industry with the making of hammocks and fur and duck coats. It was true of both, however, that the rooms in which the fly nets were made were the least attractive of the entire establishment, floors, walls, chairs and tables being black and dirty from the oil and coloring used in the leather.

The work of making fly nets is simple. The leather is first cut into fine strips on machines operated by girls. It is then

netted on low frames, two girls working on a net from opposite sides of the frame. All the work is done by hand, the strips being knotted into holes punched in the leather straps that traverse the width of the net. As all the leather used is freshly oiled and blackened the girls are soon begrimed, faces, hands and clothing being covered. The odor is unpleasant and the air in the room at one place seemed close and bad. In spite of their grimy hands and faces and soiled clothing the workers seemed cheerful, though taciturn about discussing their work, taking their cue from the proprietor who objected to their being interviewed on the ground that talking might make them discontented. Wages, according to all that could be learned, ran from \$2.75 to \$6 a week, all work being by the piece.

In the other factory, the fly net makers worked in a dark, badly lighted and poorly ventilated room. At the time of the visit it was full of smoke and dust, which it was explained was due to a temporary defect in the chimneys. All the girls in the department were young, the older workers being engaged in making duck and fur coats and in netting hammocks. The wages were small, even for the last named class of work, which demands a good deal of skill. From \$5 to \$7 a week seemed to be the highest possible figure, while the younger workers fell far below that in earning capacity.

FUR GARMENT MAKING.

The making of fur garments is open to all the objections that can be made against a trade so sharply affected by seasons, but, on the other hand, it holds out rewards for good work that are sufficient to induce a great many girls to struggle along to the point of being so invaluable to the house that they will be retained the year around, as are a few of the more fortunate and highly skilled workers. All the department stores of any importance have their fur garment making establishments, but in addition to these there are a number of factories which are exclusively devoted to the manufacturer of fur garments. Some of these make a specialty of fine furs; others only do coarser work, such as is seen in the heavy, cheap fur coats worn by

teamsters and motormen. All the finer work is done by hand, and is the better paid. The coarser work is done on machines specially adapted to the purpose. The skins are first neatly joined together, a work that requires a great deal of nicety, since the seams must not show, and then the garments are cut and put together. As most of the hardest work and the greatest rush comes in summer, when sometimes the factories are obliged to work overtime to get out their fall orders, the work is likely to become unpleasant owing to the odor in the cheaper furs and the constant flying of hair, which sticks to everything. All the factories visited, however, had excellent ventilation and the workers did not complain to any extent.

Wages were better than the average, though it must be taken into consideration that the workers suffer from long periods of enforced idleness, ranging from two to six months. Few of the workers make below \$6 a week and some make as high as \$12. The last figure is somewhat high, however, and means working at a pressure that could not long be kept up. A girl who can make \$7, \$8 or \$9 a week throughout the season is deemed to be doing well. It takes a long time to acquire anything like proficiency.

GLOVE MAKING.

Glove making in this state does not offer a large field of work to women, though there are several factories in which gloves of various grades are made. Some manufacture only the coarse, clumsy affairs in which the farmer protects his hands at the corn husking season, but others manufacture the fine hand covering worn by the society man. It is in the manufacture of the last named sort that women find both the best wages and the fiercest competition, for they are obliged to work side by side with men, who, for one reason and another, are usually able to make the greater wage.

In the only factory of the sort visited conditions were of the best. The workrooms were clean, well lighted, with fine ventilation and ample space. Walls were snowy white, windows and woodwork were clean and the whole place a model of good sanitation. The workers, too, were of the more intelligent grade,

and many of them had been with the firm for years. All the work was done on special machines run by steam power. Men were employed to do the cutting and run the heavier machines. The latter class of operators were paid more but were required to furnish their own machines, while the firm, as is the usual custom, furnished those for the rest of the force. The work was highly subdivided and few of the workers made a glove entire. Each had a certain part to do, the glove passing along from worker to worker until completed. A few girls, however, made whole gloves of a special sort and were paid considerably more than the other operators as greater skill was demanded of them. All the heavy seaming and the putting on of fasteners were done by the men.

The wages in this place varied from \$1 to \$2 a day. A girl who could not make \$1 a day after two or three months' experience was considered a poor worker, whose place had better be filled by someone more capable of learning the trade. The little helpers, who ran errands and were supposed to be learning the business, were paid from \$1.75 to \$3 per week, as they grew more proficient. From \$6 to \$8 was about the average earnings of the best workers among the women. The men made much more. There was great latitude as to hours. The operators usually arrived at the factory at about a quarter to eight and worked until half past five. In the rush season rules were more stringent and operators were required to work over time. The factory closes down for about three weeks out of the year, two weeks in July when everyone in the place takes a vacation, and usually from Christmas to New Years.

In the factories where the cheaper and coarser gloves were made neither the conditions nor the wages were so good. Wages at one place making husking gloves ran from \$3 to \$8 a week, according to the number of hours put in. The wages were below \$1 a day on an average and were lessened by the lack of work. Another place where leather palms were put into woolen gloves, wages ran from \$3 to \$6.

GRASS TWINE FACTORY.

A somewhat unusual occupation for women is the manufacture of matting and bottle covers from grass. There is only one factory of the sort in the state. It is located on the outskirts of one of the smaller cities and is at least three-fourths of a mile from the terminus of the nearest street car line. For all that it finds plenty of women eager to work at its looms, since the wages they can so earn are rather above the average for the town.

About 125 women and girls in all are employed at weaving, making bottle covers, sewing and inspecting. The material used is marsh grass brought to the factory in a raw state. It is made into twine and then this twine is woven into matting of really remarkable artistic merit. The refuse is used for making squares of woven grass that breweries use for covering bottles intended for shipment. The air of the room in which the girls who make the covers work is thick with dust and the noise of the machines is deafening. The girls wear big aprons and caps, and are covered with dust, which must affect the lungs and eyes. The weavers have charge of enormous looms on which the matting is made. The noise of the looms is even greater than that of the machines making the bottle covers, but there is less dust. In both departments, however, there is enough to make breathing uncomfortable. The weaving is done exactly as for cloth, except that everything is on a larger scale and does not require so close attention. There are other departments of the mill where girls trim the ragged ends of the matting strips, preparatory to running it through presses and sew on bindings and fringe, all the sewing being done on power machines. The quarters for the latter class of workers are by far the most comfortable in the entire establishment.

Wages were rather better than the average, running from 60 cents to \$1.50 a day. Girls making bottle covers worked by the piece and made from 60 cents to \$1.50 a day. The last figure was made only by exceptionally rapid workers, but many made as high as \$1 right along. The weavers made from 75 cents to \$1.60, the average being about \$1.25. When wages fell below that, the manager said he did not consider his looms

were being operated to their best advantage and he could not afford to keep operators who were not swifter. Girls in the sewing rooms were paid \$4 a week, and those who trimmed the matting-strips made 60 cents a day. The hours were 10 and 10½ a day according to the season. There were no Saturday half holidays and no vacations as the place never shuts down. There were no dressing rooms and poor toilet facilities. The workers were largely German and Polish. Many of them walked several miles every day to their work. It was generally agreed that the work was excessively hard and only the strongest girls could stand it.

HOSIERY FACTORY.

Though a number of factories manufacturing hosiery were visited during the progress of the investigation, it has been decided to include them under the general head of knitting and to reserve this space for a somewhat more detailed account of the conditions existing in a certain establishment, which make it unique among the rest. The establishment in question is located in Kenosha and it has had under way for some time a rather interesting experiment in the new "factory altruism." It has not been able to go so far in its reforms as has been done elsewhere perhaps, owing to the stockholders' insistence that the pecuniary value of every step shall be proved by the management before another is taken, but enough has been accomplished to justify calling attention to it.

The factory building is a model in itself. Over 500 girls are employed, but there is so much space in the great knitting halls, which are said to be among the largest in the world, that there is no appearance of crowding. Everything is clean and bright. There are many windows on every side from which glimpses are had of well kept lawns, trim shrubbery and gay flower beds, while within the scene is quite as attractive, the windows being curtained with crisp white muslin curtains, while shelves in the spaces between hold blossoming plants. There is no over-head machinery in the knitting halls, and on the low tables at which the girls sit in comfortable high backed chairs, pots of growing palms and ferns are placed, a man being employed to do noth-

ing else but keep these and the window shelves freshly stocked from the conservatory which adjoins the factory. The hardwood floors are kept perfectly polished, the toilet rooms are as clean as those in any private house, being scrubbed out every day and the whole factory from end to end is a revelation in what can be done to improve the surroundings of the workers.

Attractive environment is not, however, the only reform which the firm has in progress. In the middle of the morning and of the afternoon a ten minutes' recess is taken when the machinery shuts down and every one is supposed to take some exercise to offset the monotony of long hours at the machines. At noon hot coffee, with cream and sugar, is served by a white-capped chef, the firm furnishing all the materials at a cost of about \$30 a month. Two weeks' vacation is given everyone, though wages are not paid during that time.

Moreover, perhaps best of all, the scale of wages is exceptionally high. The average for thirty-six girls making definite statements as to their wages was \$8.06 a week, the scale running from \$4.80, for a beginner, to \$13.50. Girls of sixteen and seventeen were making \$7 and \$8 a week, and some of the older hands made as high as \$15. Workers said that a girl who could not make over \$1 a day after six months' experience would never be a good knitter. Beginners were started at \$3 a week when they lived in town, at more if they were obliged to pay board, the firm assuming that the girl when she had mastered her trade would make up for the actual loss entailed by her poor work when learning. Board in Kenosha ran from \$2.50 to \$3.75. Inspectors made from \$1.20 to \$1.50 a day.

The workers were an interesting study. In going through the place there was none of the idle curiosity usually displayed, and none of the whispered comments and giggles that frequently follow a visitor through a factory were heard. Instead the girls merely glanced up from their work, smiled at the superintendent who was acting as guide and then returned to their duties, showing no further interest in the incident. In appearance the workers seemed to be much above the average factory class, but the superintendent protested that this was merely because their self independence and self respect had been

developed by the methods in vogue. He explained that in a measure all that the firm did was in its own interest, since so much expense necessarily attaches to training a girl to the work that once she has become a good knitter it behooves her employers to keep her. His girls remained with him for years, usually until they married, and this was proved to be a fact by the statements of those filling out schedules, as the greater proportion had been with the firm for over five years.

The firm now proposes to erect a separate building for a clubhouse, putting in a gymnasium, baths and class rooms and conducting classes in manual training, draughting and the like. Heretofore the rapid growth of the plant has made it impossible to spare any room for such purposes and, moreover, the superintendent said that he had tried the experiment of getting the workers to come to the factory in the evenings for classes and clubwork, but had failed, as they did not seem to care to spend their times of recreation in the same place where they passed their working hours. Therefore he was urging the erection of a separate clubhouse and hopes it will soon be an accomplished fact.

KNITTING FACTORIES.

Under this head are included all but one of those factories visited in which woolen gloves, stocking-caps, stockings, shawls, and knitted underwear are made, for though there are differences in the amount of skill required and the wages paid, the work itself and the conditions under which it is done are much alike. There are probably more girls in knitting factories than in any other one line of industry carried on within the state, for in addition to the several large factories in Milwaukee, which employ nearly a thousand girls alone, in almost every town of any manufacturing importance whatever a factory in which knitting of some sort is done may be found. It is as if the knitting needle, even in its modern and more complicated form is still pre-eminently the woman's tool, which the exigencies of industrial life have not as yet wrested from her. Knitting remains a distinctly feminine employment, with all the drawbacks and advantages that go with such,

The knitting factories vary in size from the one room with a dozen girls at work to the large building with a hundred or more girls working on each of its several floors. Some of them are thoroughly modern in equipment, with ventilation, lighting and general sanitation as perfect as possible, while others are dark, dingy, dismal places unfit in every way for factory purposes. In the smaller towns and in the outskirts of Milwaukee, where a number of factories are located, there is always plenty of light and air, but many of the factories are in the heart of the city, housed in buildings that are ill adapted to the purpose to which they are being put. In one such factory, where 250 girls are employed, thirty of the number were found huddled in a small gallery swung from the ceiling of the first floor where the sorting and packing were done. These girls did the finishing on stockings and caps, working ten hours a day. They complained a good deal of headache, which they attributed to the lack of air, for though there were plenty of windows, it was impossible to keep them open without subjecting the girls who sat nearest to a draught. The height of the gallery was nine feet, which made it come within the letter of the law, but for all that the air was bad. Two hundred girls worked in the knitting hall, which was crowded and close, and twenty were employed in packing. The dressing room was another gallery, so small that the workers had to await their turn at changing their clothing, while the closets were in bad condition. Those on the first floor were placed next to that used by the men and were not screened off in any way. In another factory employing 500 girls there was complaint of inadequate dressing rooms, but members of the firm announced that an addition was shortly to be made to the building for the purpose of giving the girls better quarters. Against a third concern, employing 300 girls, the same complaint of over-crowding was made, the machines being placed too close together and all the spare space, even in the knitting hall, being taken up with stock. These were among the worst factories. There were others in which the dressing rooms were commodious, and the light and air good. On the whole, however, the knitting factories suffer in comparison with other places in which women are employed, the over-crowding

which is to be found in nearly all of them being one of their worst features.

Whatever the particular output of the factory, the process of manufacture was similar in all. Stockings and stocking caps were made on circular machines, so easy of operation that usually a girl looked after two or three at a time. Gloves and underwear, demanding modifications of shape, were made on machines, controlled by a lever but operated by steam, hydraulic or electric power. In one case, however, a factory making a special feature of its "hand-knit" underwear, required its best grade of goods to be made on hand machines, for which no power but that coming from the girls' arms as they pushed the levers back and forth, was furnished. Moreover, the hand workers were for the most part unable to sit down to their work, though some of the more experienced girls declared that if they had high stools they could use them a great deal when their work had reached certain stages where it was not necessary to give each row of stitches particular and separate attention.

The question of seats in these factories is an important one. Some of the factories furnished chairs to their operatives, others only small wooden stools without backs, and one required the workers to stand all day. In this particular place the owner declared that his machines were of such a kind that they could not be operated from seats, and he insisted, moreover, that it was less harmful for girls to stand all day than to do their work seated. The girls did not agree with him, but were chary of expressing positive opinions, apparently being afraid of losing their places. Except for the noon hour when, as many as could found resting places on the few benches in the place or on the low wooden boxes in which they kept their lunch baskets, the girls stood at their machines ten hours a day. When they grew too weary to bear it any longer they dropped on the floor beside their machines and snatched a few moments of rest while their neighbors kept a sharp eye out for the foreman that they might give notice when he approached. Girls who had worked in this factory but had left it to engage in other employment at which they were found at the time of the investigation, talked

freely of the wearing effects of their former work, saying that it was impossible to describe the fatigue that came from ten hours of constant standing in front of a machine, especially when to this is added the exertion of pushing a heavy lever back and forth, as is necessary in certain parts of knitting. The evidence of the girls was so opposed to the opinion of members of the firm that the latter were at length compelled, through the efforts of the Bureau of Labor, to put in a sufficient number of seats. At a factory in one of the smaller towns where stocking-caps were a special feature of the output, few of the girls sat at their work as they were obliged to attend to two machines. There were, however, benches near by on which the girls could rest whenever it was possible, and at the larger machines on which shawls were made all the girls had chairs. It would seem only humane that these factories should put in not merely stools, but chairs with backs to relieve the fatigue that comes from ten hours of constant sitting at a machine. The fact that very few of such workers are free from spinal curvature in more or less pronounced form is an argument for better seating facilities. In all the factories where only stools are provided for the workers, girls were found working in the crouched position that inevitably results in bent backs.

The hours in the knitting factories were almost without exception ten a day. A few gave Saturday half holidays. One required night work from part of the force, but it was explained that this was not compulsory and was rewarded with extra pay. In one large glove factory, when the piece system was entirely followed, the girls practically kept their own hours. The proprietor of this particular factory seemed to have no objection to the plan, a point of view which was not shared by many of his brother manufacturers, whose greatest complaint was the lack of punctuality among the workers. In many factories, even where all the work was paid by the piece, strict discipline prevailed and the operatives were obliged to be at their machines at a certain hour and were not allowed to leave them until a certain set time. In several of the factories a Saturday half holiday was allowed in summer, but the girls were compelled to make up their full quota of sixty hours by working half an hour

extra on the other days of the week. In one factory only those workers who turned out a certain amount of work were allowed to take Saturday afternoons off.

Vacations with pay were unknown, and comparatively few of the workers allowed themselves the luxury of days of idleness. In factories which had slack seasons it was possible for the operators to have periods of rest, but where, as was the case in many factories, work was steady throughout the year, to take a vacation was to run the risk of losing one's machine. One forewoman who had been working for eighteen years had never had a vacation in all that time. Once she had been ill and stayed at home two weeks, but she had never taken a day off on any other occasion. In all that time she had never been outside the limits of the city.

Knitting, especially in the finer grades, requires the closest attention and the exercise of considerable skill. Girls making fancy woolen gloves frequently had to follow the most intricate patterns and were constantly obliged to keep track of the number of stitches taken. They said, however, that it was always much more interesting to make the intricate pattern and to work in several colors than to fashion plain dark gloves, the making of which was monotonous. In the underwear factories the greatest care had to be taken in fashioning the garments after the models furnished. A great deal of the knitting done in factories, however, is purely mechanical, the machine doing all the work, even stopping automatically when it is completed.

Wages varied greatly. For the thirty-six who made definite report as to their earnings, the average was \$4.30 a week, the scale running from \$1.75 to \$14 a week, the last named figure being the salary paid an experienced forewoman. The personal notes taken in the course of visits to the various places are more interesting. In a glove factory the usual wage was \$6 or \$7 a week. By working hard the girls said they could make as high as \$8 and \$9, but the strain was too great to keep up. At this factory the older workers said the scale which had gone down during the hard times, had never regained its former figures, so that it was impossible for even the best workers to make as much as they had in former years. In a large knitting con-

cern which spins its own wool, the carders, spinners and spoolers made from \$1.50 to \$4 a week. Girls who had worked for three and four years were not making over \$3.50 a week. For knitters the scale ran from \$1.50 to \$7 a week, with the average earning at about \$4. Stocking finishers made about \$2.50 or \$3 a week. On one whole floor in another factory, it was stated that not a girl was making over \$3.75 a week, but the work, it is true, was of the kind requiring a small amount of skill. It can be safely said that by far the greater proportion of girls in most knitting factories make less than \$1 a day, and only the exceptional workers get above that figure. This is not true, however, of the factories where knitted underwear was made and where the wage scale was higher. By hard work girls in those places could make from \$8 to \$12 a week. Few of them did, however. In one factory, a story was told of a phenomenal worker who made from \$18 to \$27 a week for several years and then broke down in health. The makers of hand knit underwear made about \$7.50 a week when work was steady, but lost much time from slack business and break-downs of machinery. Some days, one of the most expert workers asserted, it was hard to make as much as 50 cents. Girls operating two and three stocking-cap machines and those making shawls made from \$4.50 to \$6 a week. Girls who sewed borders on shawls made \$1 or \$1.50 a day.

Employers denied that the scale of wages had fallen. They admitted that such seemed to be the case, but the fact was that with improved machinery more could be turned out in a given time than formerly. Gloves which fifteen years ago brought the knitters \$1 a dozen were now made for 35 cents, but the total earning for making them is as much as ever owing to the larger capacity of the machine.

In many of the factories systems of fines were in vogue. Girls were obliged to pay for broken needles and poor work. Needles were charged up at a cent apiece and frequently, owing to defective machines, so many were broken in the course of a day that even at this small figure they made a sad hole in the slender wages. Tardiness in arriving at work was punished by "docking." One factory, in its posted rules, announced a

fine of ten cents for tardiness and also the detention of the first month's wages of any beginner who did not remain the month through. This was excused on the ground that a beginner always spoiled more work than her wages came to and there was no profit in her services until she had gained more experience.

LACE PAPER FACTORY.

About forty girls in Milwaukee work in a lace paper factory, which ships its wares all over the country. The girls do folding, counting and packing and also feed the machines on which the paper is perforated in various designs. All of the work is light and most of it is done seated, only the machine girls standing. The manager, however, in order to relieve these arranges the work so that the girls change off at stated intervals and none is on her feet all day. The place was light and sanitary. The hours are from 7 to 12 and from 12:30 to 5, with Saturday half holidays in summer, earned, however, by working an extra half hour on other days of the week. Wages run from \$2.70 to \$4.50 a week, the average for twenty-four workers being \$3.40. Almost no skill is required. Artisans for making dies are employed, but girls never do that sort of work, and only boys are received as apprentices.

LYE WORKS.

The making of lye is not an extensive industry in Milwaukee, but it was included in this investigation because it gives peculiar employment to a limited number of young girls. In the establishment visited fourteen girls were wiping and labeling cans of lye as they came from the machines where they were filled. The most striking thing about the place was the air which was so strongly impregnated with the fumes arising from the lye that the first breath irritated the throat and left the visitor gasping and coughing and with watery eyes, as if strong ammonia had been suddenly inhaled. The workers, however, did not seem to be suffering from it. They said that one soon grew accustomed to the air, though one girl naively remarked that it was "always worse on Monday morning when the girls

had been breathing another kind of air over Sunday." It apparently did not affect their general health, and probably the building, though it was unfitted for factory work, was not unhealthful, the lye keeping everything clean without much effort on the part of the managers.

All the girls wore strips of rags tied about their hands to protect them from contact with the lye that clung to the cans, but in spite of such precautions many of them had sore fingers and one displayed scars on her arm which had come from being badly burned with the stuff. Their work was to wipe the cans free from lye, paste on labels and pack the cans in boxes. On the third floor two girls were engaged in even more disagreeable work and were breathing air still heavier with lye fumes than that on the second floor. Three men, their heads well protected, filled and soldered the cans. One girl hooded and gloved placed the cans in a revolving brush arrangement by which they were wiped fairly clean. The other girl caught them as they came out and put them in boxes to be sent to the floor below to be wiped a second time and labeled and packed. It seemed almost impossible to breathe in the air on this floor, but the workers had apparently grown accustomed to it. At noon, talking with the girls, they expressed themselves as dissatisfied with their work, but said it paid as well as anything and was to be preferred to housework, which some of them had tried. One girl who was getting \$3 for wiping cans had only received \$1.50 in a knitting factory and had given it up on that account. Another girl had been in domestic service on a wage of \$1.50 a week and had taken the lye works in preference.

The wages were from \$3 to \$4 a week. The hours from 7 to 5:30, with half an hour at noon, no Saturday half holidays and no vacations, as there is little slack time. The girls eat in the workrooms. There are no dressing rooms and only a single closet, which is placed conspicuously in the workroom. The lavatory is merely a sink by the side of the closet. None of the girls were seated at their work. The foreman was asked if he permitted the girls to sit down and he replied that there were plenty of boxes about, which they might use if they wished. He never tried to stop them from sitting down, and he appealed to the girls

to know if he had, asking if they would rather sit than stand. As might be expected, they promptly said "No."

MATCH FACTORY.

Girls in match factories are employed at feeding machines and packing matches, the work being light and fairly well paid. In the establishment visited there were 110 girls at work and the conditions, except for the all-pervading odor of phosphorus and the ever-attendant danger of disease which threatens every worker in a match factory, were far above the average. Not only were ventilation and sanitation as perfect as possible under the circumstances, but what, for lack of a better term, has come to be known as 'factory altruism,' probably reaches its highest point for Wisconsin in this place. Necrosis is the grim terror that stalks at the side of everyone who passes much of his time in a match factory, and the greatest precaution must be taken constantly to prevent the disease getting a foothold. In the factory under consideration these precautions have taken on a most interesting phase and besides working successfully so far as warding off the disease itself, afford an opportunity for studying the effects and benefits of certain reforms so far but sparingly followed in Wisconsin factories. Necrosis is a disease of the bone and usually finds lodgement through a decayed tooth. Once it gets a start it is almost impossible to check it, and the victim's jawbone is fairly eaten away. The chief safeguard against the disease is a perfect condition of the teeth and general bodily cleanliness, and it is toward the accomplishment of these ends for their people that the factory is working. The company employs a dentist who looks after the teeth of every worker at stated intervals and no one is allowed to work who refuses to comply with the dentist's orders. Baths have been put in for both men and women, but are not extensively patronized. The men use them on Saturday afternoons when the factory closes down at three o'clock, but the girls do not use them at all. The most remarkable thing about the factory are the lunch rooms that have been fitted up and the luncheons that are served free by the firm every day. It has been proved that a great deal of necrosis starts from food contaminated either by exposure to air impreg-

nated with phosphorus fumes or by hands or clothing that have come into contact with the phosphorus. To lessen danger from this source, the company has fitted up dressing rooms and lunch-rooms for both sexes in a building separate from the main factory and has issued strict orders prohibiting any worker from carrying his lunch box or dinner pail into the workroom. Instead he is supposed to leave it with his street clothing in a ventilated locker reserved for his individual use. Ample lavatory facilities are provided and every worker is supposed to sit down to his lunch with perfectly clean face and hands. He is then served with hot soup and coffee of excellent quality, which added to what he has brought with him, makes a really substantial meal. It costs about \$1,500 a year to supply the 250 employees with the soup and coffee, but the firm believes that it is money well expended. The girls' lunch room is extremely attractive. The windows are curtained, the walls are kept freshly kalsomined and the tables and chairs are well polished. The firm also started a reading room and circulating library, but did not have much success with either, though the girls carried home the fashion magazines when they had gowns in process of manufacture.

Disagreeable as is the odor of the phosphorus the workrooms were more pleasant than in many factories. The girls sat at high platforms, part of them feeding small blocks of wood to a machine which split and dipped the matches, the others packing the matches in boxes as they came out. Another squad of girls operated box-making machines, and some did up bundles of matches ready for shipment. All the girls, with the exception of the bundlers, sat at their work in high-backed, tilting chairs. No heavy exertion was required whatever.

Wages ran from 50 cents to \$1.25 a day. Girls were started at 50 cents and were put in the "coops," as the places from which the machines were fed are called. Packers made from \$1 to \$1.25 a day, and box makers 90 cents. The average seemed to be about \$1 for the older workers. The hours were from 7 to 6, with half an hour at noon and only seven hours on Saturday. At Christmas every girl gets 50 cents from the company, and if she is the support of her family, a turkey besides. The forewomen

who had been with the company thirty years, said that wages and opportunities for work had steadily decreased in the business, as new and improved machinery had been put in. Work that twenty years ago would have taken ten girls to do could now be done by a single machine operated by one girl, who received only 80 cents for her services, while the ten might have made \$1 apiece. She did not think match making so very dangerous. Looking back over her experience in the factory she could recall only one death among the girls and that was caused by typhoid fever. There were occasional cases of necrosis, but at the time of the investigation only one woman was so affected.

MINERS' SOLES AND LEATHER FACTORY.

The single concern of its kind in the state gives employment to about 500 girls, most of whom are Poles of the more ignorant type. The work consists of making leather soles and heels from scraps gathered at the tanneries in the neighborhood. All of the work is done by hand, the girls working at long tables with no other implements than a pot of paste and a pile of leather scraps. All they have to do is to paste the scraps in smooth layers on pieces of leather, the slabs so made being then placed in a press to make them still more compact. Each girl has her directions to make a slab of a certain thickness, for a sole or heel, as the case may be, and all that she is concerned with is to get as many layers in place as are necessary. It takes about a day to learn the business, and after that there is no great expenditure of mental energy. The bodily fatigue must be considerable, however, as most of the work is done standing. The girls were smeared with paste, but the company has provided far more comfortable and capacious dressing rooms than are usually found in factories, a trough with running water being supplied for them to wash in, while there were separate lockers for their street clothing.

The work, being so purely mechanical and calling for the exercise of so small an amount of skill, was naturally not particularly well paid. Beginners were started at \$2.25, were soon advanced to \$3, and later could make \$3.75 or \$4 a week, rarely

more. A few rapid workers sometimes made \$6, but this was rare.

The manager said that he experienced some difficulty in getting German and Polish girls to work together. Almost all the workers were Polish, and Germans, even when induced to come in to fill vacant places, rarely remained long. He was fresh from the branch factory in the east where negroes and whites, Irish and Germans worked peaceably side by side and the national antagonism of the two races furnishing the greater proportion of unskilled labor in Milwaukee seemed to perplex him.

PAINT FACTORY.

The most interesting feature of the establishment in question was the unusual comforts that the firm has provided for its workers. About forty girls, mostly of the young, unskilled class, are employed at labeling cans, preparing color cards, printing labels, stamping, etc., all the work being simple and easily mastered. Owing to the removal of a part of the business to another quarter of the city the firm has recently come into possession of some spare room, and instead of using it for factory purposes has fitted it up for its work people. Half of it is given over to the men employes as a smoking, game and lunch room, and the other half belongs to the girls and has been furnished in a most attractive fashion. The rooms were formerly used for office purposes and the woodwork, floors and walls are consequently of better material and are more handsomely finished than they otherwise might have been. The girls' room faces on the street and is flooded with sunshine. At one end are square oak tables, with polished tops and little pots of growing ferns in the center. At these the girls eat their luncheons. Divided from this end of the room by gay Japanese screens is the rest room, with couches, rocking chairs, heaped up with pillows, a table for games and another for magazines and books, which are abundantly furnished. Adjoining is a neat toilet room and opposite this is a tiny kitchen, fitted up with gas stove and a china closet. Here the girls prepare simple luncheons, making coffee and tea, boiling eggs and even cooking meat. One girl is detailed to go

down half an hour before the noon whistle blows and get things ready for the rest. The firm tried to serve coffee at a cent a cup, believing that it was wiser to ask a nominal sum than to furnish it free of charge, but the parents of some of the girls objected to their spending any of their wages in such a way and the scheme fell through. Under the arrangement in vogue at the time of the visit those who wished to supplement their cold luncheons contributed their quota of the expense involved. The girls were most enthusiastic about their lunch room. All of them had worked in other factories, and their comparisons were interesting. They all seemed to feel a spirit of proprietorship in the rooms and took the greatest care of them. A member of the firm said that shortly after the place was opened he came down one Sunday morning to find two girls on their hands and knees scrubbing the floor. He promptly hired an extra scrubwoman, but said the incident proved better than anything else the interest the girls take in the comforts provided for them.

The hours are from 7 to 6, with three-quarters of an hour at noon, Saturday half holidays through July and August and two hours off on Saturday afternoons for the rest of the year. Wages ran from \$3 to \$7, the average for thirty making reports being \$3.68. Girls are not started at less than \$3. In the color card room the girls are paid from \$3 to \$3.75. The girls who label cans get about the same. The work used to be considered dangerous owing to the risk of white lead poisoning, but the risk has been so greatly reduced of late years that there is seldom a case of illness traceable to the work.

Another noticeable thing about the factory was the way in which the girls were kept from association with the men. Both at the noon hour and while at their work the sexes were kept apart.

PAPER BAG FACTORY.

In the paper bag factories the girls have light and monotonous work to do, for which, as compared to the average of factory labor, they are well paid. The bags are made on machines operated by men, the girls merely taking the bags as they come out and tying them in bundles. Even the counting is done automa-

ically by the machine. A few girls are employed as inspectors, and are better paid, but have harder work. The girls at the machines stand or sit, as they choose, tall stools being provided for every worker. The factory visited, which is in the paper mill district and so more or less affected by the conditions existing in that larger industry, is large, well ventilated with good light and fair sanitation. Ample dressing rooms are provided. The hours were from 7 to 6 with an hour at noon, and an hour less on Saturday afternoon. A few girls are kept on a night force and are paid eight cents an hour, usually putting in twelve hours a night, but not working on Saturday night. The wages for the day machine girls are 80 cents a day. The inspectors get \$1.25.

PAPER MACHE FACTORY.

The making of artistic and commercial papier mache figures is a Milwaukee industry giving employment to about 100 girls in the busy season, though as trade falls off after Christmas that number is reduced to thirty or less. The work done by the girls is of two sorts. Some of them fill the plaster of paris molds with moist paper and paste and others tint the completed figures according to the directions of the artist in charge. The filling of the molds is unpleasant but not hard work. A certain amount of skill is required to put in the bits of moist paper, so that every line and curve of the mold shall be preserved, but the workers speedily acquire that and manage to turn out a large number of molds in a day. Naturally they get themselves covered with paste in doing so, but the firm provides dressing rooms and all the workers keep working gowns at the factory. The girls who tint the figures have nicer work but it is little less mechanical than making molds, as they are obliged to follow closely the model made by the artist who does all the designing.

A somewhat unusual feature of this factory is the matron whom the firm employs to look after the girls, most of whom are little more than children. A room on an upper floor has been set aside for dressing rooms and lunch rooms and the matron is in charge of them. She is supposed not only to be with the girls in the factory but to act as a friend to them out of working

hours, visiting them at their homes when they are sick or in trouble. The firm has not been financially able to carry its philanthropic endeavors so far as its members wish and the lunch room is only a bare, though clean place. Half an hour is given at noon and ten minutes in the middle of the morning and afternoon, with Saturday afternoons from half after four on. There are no vacations with pay, but when a deserving girl needs rest the firm sees to it that she gets it without expense to her. The friendliest relations seemed to exist between employers and employes, making the place an interesting study, as it showed how much can be done without the expenditure of much money.

Wages were not high. They ran from \$2.50 to \$5. Some of the girls have been with the firm ten years but the greater number were beginners, who as they grew older would probably seek more lucrative employment. For thirty-two making definite returns on wages the average was \$3.41, the scale running from \$5, which one worker received, to \$2.25, which was the lowest wage paid.

PAPER MILLS.

The great paper mills of the Fox river valley, which employ hundreds of girls, offer an unusually interesting field for an investigation of the present sort. This is due, in large measure, to certain peculiar conditions, existing both within and without the mills, and affecting the workers' social as well as business life. What follows, it must be understood, is based on a survey of the situation as a whole, and though a thorough and detailed investigation was made, no one community or establishment is specially referred to in the report. It has seemed wise, however, because of the somewhat successful organization of the workers and because of the social differentiation in question to go more into details than has been thought necessary to do with many other kinds of work in which women are engaged.

The mills are located in the smaller cities and are usually in groups of one or more, so that there is to be found in these communities a well defined class of paper mill workers, who are again divided into two distinct classes, between whom a social gulf seems to be tacitly fixed, the girls in the finishing rooms

having nothing to do with the girls in the rag room, who, however, often have the advantage of the others in point of wages and hours, despite certain disagreeable features of the work itself. The mill buildings are generally large and comfortable, with plenty of light and air, their picturesque location on the banks of rivers or canals, assuring both. Some of the buildings are old, inconvenient and unsanitary, so that the surroundings of the workers in every department are far from comfortable, but this is true only of a comparatively few.

The finishers, which is the generic name for all the girls who work at the cutting, calendaring and stamping machines and who count, fold or bundle, usually have the pleasantest quarters in the mill, outside of those occupied by the office force. The cutter hands, as they are called, are stationed at the end of the machines on which the paper is rolled out and it is their duty to catch each sheet as it comes from the rollers, smooth out the wrinkles with a heavy flat piece of wood and lay it straight on the receiving tray. The work is light, but exceedingly monotonous, and the constant strain of keeping up with the machine proves tiresome. The girls also complain that their arms ache from using the long stick with which they smooth out the paper. Not infrequently a girl has her fingers crushed by getting them between the rollers. From the cutter hands the sheets go to the counters, whose work is to separate the paper into reams. They do this with remarkable rapidity, their fingers flying over the edges of the sheets and rarely making a mistake. They, too, say that the nervous strain tells in time. The stamping and calendaring are done on machines that are comparatively easy to operate and the heaviest part of the bundling is done by men.

The work in the rag rooms is in sharp and repugnant contrast to that done in the finishing rooms. Even in the more modern mills, where earnest efforts have been made to supply the workers with all possible conveniences, the rag rooms are disagreeable places, the nature of the work itself being responsible for this. In the better mills ventilating systems, with suction pipes to draw off the dust have been put in, and these mitigate the unpleasant features, but even with these things, which only a few mills have, there is much about the work that is repulsive. The

sorters work at long benches divided into sections. Each section is covered with a coarse wire grating and provided with a sharp knife. The rags are brought to the girls in barrels or trucks and are dumped upon the grating and thoroughly shaken so that the loose dust may fall through to the receptacle provided beneath. Buttons are cut off and seams ripped open on the upright knife, so that no dust shall be left in the rags to spoil the whiteness of the paper. The work is usually paid for by the hundred pounds. Before being brought to the girls the rags are threshed out in machines, usually operated by men, though in some instances girls assist at this. The room in which this part of the work is done usually adjoins the sorting room so that the dust is carried into it in spite of all precautions. Added to the dirt and dust is the unpleasant smell of old rags, long packed in bales and so grown musty.

The sorters, however, do not seem to suffer from their work as much as might be expected. Physicians in the communities in question say that throat trouble is somewhat common among them, and that serious epidemics are to be traced to the rags in spite of all the care that is taken to disinfect them. On the other hand, the girls have a theory that the disinfectants used in the rags really ward off disease. They complain most of the fatigue of constant standing, no seats being provided.

If stories that are told by the workers are to be relied upon the conditions at one time were far worse than they are now. In one mill, a former superintendent kept the windows of the rag room nailed down, but when he was superseded the spikes were taken out and plenty of fresh air was let in.

The hours of work required in the paper mills have been a bone of contention between employers and employes for years, but have of late been greatly reduced through the efforts of the unions. The cutter hands have always suffered the most and in some of the mills still work excessive hours. They are divided into shifts or "tours," one of which works ten hours one week and thirteen hours the next, the mill not closing night or day. The hours for the shifts are from 7 a. m. to 6 p. m. one week and from 7 p. m. to 6 a. m. the next, with the same pay. In the unionized mills, the hours are from 7 to 6, with an hour at noon

and Saturday afternoons off from 12 o'clock. In the unionized mills, where night work is still required, the workers put in thirteen hours a night every other week, but have Saturday nights off, so that the total working week is brought within the required number of hours. The girls who work at night say that they can usually get from one to three hours' rest, as the machines do not run continuously. Girls in the rag room work nine and ten hours a day.

Wages vary from \$1.25 a day, which is paid the finishers, to 50 cents a day, which is made by the least skilled sorters. In the finishing rooms the scale runs from 60 cents to \$1.25 a day. In some mills all the girls in the finishing room were paid 75 cents a day; in others all were paid 87½ cents, and in others 90 cents. In a tissue paper mill each of eight girls employed at counting was paid \$1.25 a day. Rag sorters are usually paid by the pound and make from 50 cents to \$1.25. In one mill where they were paid by the day they received 75 cents. The weekly average for the thirty-nine who filled out schedules was \$4.70.

Selections taken at random from rough notes made at the time of the investigation may be of interest to those wishing for further details of a somewhat peculiar line of work:

———. One hundred and eighteen girls in rag room; well lighted; windows on three sides. Rags threshed in adjoining room. Girls all stand. Foreman said he had tried allowing them to sit on planks laid across the barrels holding the rags, but found they did not get work out fast enough. Wages from 30 cents to \$1.25. Average about 85 or 90 cents. Hours 7 to 5:30, with half an hour at noon. Saturdays close down at 4. Fifteen minutes for lunch in middle of morning. No overtime. Little dull season. Steady work most of the year. In finishing room thirty-five girls sort, stamp, count and seal, making from 60 to 85 cents. Up to a few days ago the highest was 75 cents.

———'s. In finishing room girls work in shifts. One shift goes on at 7 A. M. and works until 6 P. M., and the other goes on at 7 P. M. and quits at 6 A. M. Change about from week to week. Get same pay, 87½ cents a day. Fifteen so employed. In rag room thirty girls work from 7 to 6 and get 75 cents a day. No piece work. Rag room dustier and not nearly so good as at ———, the mill being an older one.

———. One hundred and twenty-five girls in all; 75 in rag room. Fine mill, light, airy, with plenty of room, good ventilation, superb view from windows; river flowing by on both sides. In rag room girls work from 7 to 5 except on Saturdays, when they work from 7 to 4. Finishers from 7 to 6, with Saturday half holidays from noon on. One hour at noon. Finishers paid from 75 cents to \$1.25 a day. Rag sorters make from 50 cents up at piece work. Girls operate calendar machines that require close attention.

— — —. Eight girls employed only at finishing. All but one, a beginner, get \$1.25 a day. Hours 7 to 6, with Saturday afternoons off. Girls said they had no separate toilet room. Foreman said they had keys and kept it locked, but finally admitted that there was no separate place provided for them.

— — —. Firm operates three mills employing in all twenty-five girls, only two of them being rag sorters, as the rag rooms have not been in operation for some time owing to the high price demanded for rags. The girls have recently gone into the paper makers' union. Wages were the union scale, 75 cents a day for the cutter hands, \$1 for the finishers and 75 cents for the rag sorters. The hours were from 7 to 6, with an hour at noon and Saturday afternoons, from 12 o'clock off. In one mill four of the cutter hands take turns, week and week about, at night work, two going to work at 6 in the evening and staying on until 7 in the morning, while the other two fill up the day schedule. This makes thirteen hours of night work, but since the strike and the unionization of the girls no Saturday night work is required. The cutter hands have no regular lunch time, but eat when the machine permits, but on the other hand have more or less leisure, as the machines do not always run steadily. Girls said that there was rarely a night when they did not get from an hour to three hours' sleep, curled up on the sorting tables with their heads on a pile of paper and a felt mat over them for warmth. All the girls said that they believed in union life as the only way of protecting their interests and cited the reforms the union has been able to bring about as proof. The three mills were clean and well ventilated and separate dressing rooms and closets were provided for the girls.

— — — — —. Employs ten girls, six being cutters, at 75 cents a day, and four finishers at \$1. No sorters. Superintendent said there were few shut downs. Mill clean and light. All the girls were in the union. No night work required.

— — —. Thirty-five girls, twenty-seven being employed in the sorting rooms where rags, paper and paper shavings were handled. The mill is old, and the rag sorting rooms are dirty and uninviting, with no modern appliances for ventilating them. The wages are the same as in the other mills, except that for some classes of sorting the work is paid for by the piece, though the wages amount to about the same. The mill is not in the union, however, and the girls were contemplating another strike on the following Saturday if Saturday afternoons were not allowed them, the "scabs" discharged and the girls who went out on strike and lost their places last winter reinstated. The hours now are from 7 to 6, with an hour at noon and no extra time off on Saturday. Sometimes overtime work is required and the girls are paid half a day for working up to 10 o'clock at night. The sorting rooms seemed dustier and dirtier than in any of the other mills so far visited. The girls who work at the shavings stood at the front of a revolving cylinder of wire screening which threshed out the dust, their work being to pick out the colored strips. The rag sorters worked at bins and barrels. Saw one girl jumping on the top of a barrel to press down the rags. The waste paper sorting was done in the same way, and there was none of the protection from dust to be found in some of the more modern mills.

— — —. Seven girls employed, six cutter hands at 75 cents and one finisher at \$1. Cutter hands work in shifts of three, taking turns at night and so working thirteen hours a night one week and ten hours a day the next. Only work five nights, however, and have Saturday afternoons off. All in unions. Mill expects to arrange for all day work shortly.

———. Eight girls, six cutter hands at 75 cents, one finisher at \$1.25 and one finisher at \$1. Not in the union. Hours from 7 to 6, with occasional overtime work to midnight. No Saturday afternoons. The girls went out with the rest, but the mill refused the concessions and the workers came back. Mill has no rag room, but it has what is worse, a shingle mill in which eight girls pack shingles, working in the flying sawdust in a barn-like place. These eight take turns at night and day work and get 75 cents a day. Hours are from 7 to 6 and from 6 to 7, with an hour for lunch. All the girls in the shingle mill were Polish. Other part of the mill was clean and not bad.

———. Twenty girls in the rag room at 75 cents a day, seven cutters at 75 cents a day and two finishers at \$1. Night work the rule and girls work in shifts, ten hours a day one week and thirteen the next. Not in the union. Rag room unventilated and with no modern appliances for admitting air. Same firm has a mill at ———, where nearly seventy work in the rag room. Wages there are paid by the pound, and are higher, owing to the better grade of rags, girls getting 20 cents, instead of 14 cents a hundred pounds. Finishers get from \$1 to \$1.35 and cutter hands 75 cents.

———. Mill forms the nucleus of a small community from which most of the workers including the dozen girls employed are drawn. At time of visit only two were on hand, the whole force having been laid off for the day. The stories of the two were interesting, however. Both had come down from where they had been employed as finishers in a paper mill and where they had homes. The mill there had its seasons of slack work, and growing discontented the girls had come to ——— at the time the mill was opened. Since then they had never had a full week's pay. Their wages were \$1 and \$1.25 a day but they never made the full amount, as they lost from a half to three days a week. Occasionally they had to work overtime and were paid at the rate of a day's wage for three evenings, but this they said did not begin to compensate for the loss. They boarded, paying \$12 a month for their board. They rode back and forth to work every day on commutation tickets which cost a dollar a week. Made on an average about \$5 a week. One of these girls had been working nine and the other seven years at the trade and expressed themselves discouraged over the outlook, saying that it scarcely paid to go into the business.

In talking with a group of rag sorters an effort was made to discover why they preferred their work with its dust and dirt to domestic service. All said it was a question of hours and money. One girl of sixteen had done housework for a family of five adults and two children, doing the washing and ironing but not the baking. For this she was paid \$1.50 a week. Another girl had been a nurse girl at 75 cents a week. All said that they had never made over \$2 a week at housework and that they had always been obliged to work from early in the morning until late at night, doing heavy washings and cleaning. One girl said that she would like to learn cooking and asked all about the cooking school in Milwaukee. None had ever gone beyond the fifth grade in school and all had started to work at thirteen—

before the fourteen-year-old age limit was enforced, probably. None of them liked rag sorting; said they grew tired standing and were always dirty. Still, compared to what was asked of them at housework, rag sorting was easy.

A novel side to the life is the element of chance that enters into it from the "finds" that are sometimes made in the rags. Girls frequently come across small bills and coins, which they are entitled to keep, and the good fortune that befell one girl, who found \$300 sewed up in an old coat, is a constant stimulus to the rest, and may in part explain why it is never difficult to hire sorters.

PEARL BUTTON FACTORY.

Girls in the pearl button factories, of which there are several in the state, are employed at operating machines which drill and polish the buttons and at sewing them on cardboard for the market. In fact, all the work except that of cutting the button forms from the shell is done by girls, though some of it seems to require considerable muscular effort and to be unfitted for women. This was true of the heavier drilling machines which pierced the button forms and which were operated by levers. The greatest objection, however, is the dust arising from the shell as it is ground away. The drills and polishing machines are fitted with pipes to carry away the dust and most of it is disposed of in that way, but enough remains to make it necessary for the girls to keep their heads covered while at work, and it would seem likely that considerable must be breathed into the lungs, though the workers protested that they did not mind it in the least. The girls who sewed buttons on cards had pleasanter and cleaner quarters as well as nicer work, but their wages were not so good. Besides sewing the buttons on cards they sorted them into different grades according to their quality.

Wages ran from 75 cents to \$1.50 a day. The girls who did the sewing made about 75 or 80 cents a day and the machine girls averaged about \$1. There was only one girl making so high as \$1.50 a day and there were many weeks when she fell below that figure. This particular girl was an interesting type, who tried tobacco sorting, knitting and boot and shoe making, going

from one occupation to the other as wages and opportunities for advancement grew smaller. She was the swiftest worker in the factory and was planning to enter a nurses' training school, having had all the factory life she cared for.

The hours in the factory were from 7 to 6, with an hour at noon.

PIPE COVERING.

As showing still farther the conditions and possibilities found in unskilled factory life, an establishment which in the busy season employs seventy girls who merely cover asbestos pipes with canvas was selected. The factory was large, new and well lighted, but the work rooms were hot because of their proximity to the great ovens in which the pipes are made. Even in the winter the heat is bad, but in August when the busy season is at its height it is almost unbearable, in spite of a special ventilating system by which the air of the factory is kept in constant circulation. The work required of the girls was exceedingly simple, being merely to fold canvas in squares for the cutting machine, which was operated by a man, and to paste strips of canvas about the pipes. The work was quickly learned and was not hard, though it necessitated standing all day. No seats, whatever were provided for the workers, even for what idle time they might have during the day.

The highest paid workers in the place were three girls who received \$6 a week. Four others were paid \$5 and the rest from \$4 to \$4.50. In the winter and early spring there was a great deal of time lost owing to slack business. It was estimated that the girls had employment only about nine months out of every year.

RAG SHOPS.

In another part of this report the condition of the rag rooms in the paper mill district was discussed somewhat at length, but it is safe to say that the worst among them is better than the best of the places in Milwaukee, where the rags, collected by peddlers all over the state, are sorted before being sent to the mills. A number of these shops were visited, but owing to the fact that

the workers found in them were not only unable to speak either English or German, but were ignorant and suspicious, it proved impossible to get anything of their personal point of view. Therefore, only the actual conditions under which they worked could be noted. These were open to every sort of objection, the shops being dirty and filthy, badly ventilated and often unheated. They were usually located in the second story of a tumble-down dwelling house, the first floor being used for receiving the rags as they come from the peddlers and for the very limited office business that was necessary. Only two of the shops were in large buildings in any way fitted for business purposes.

The sorting rooms in these smaller shops were reached by steep stairs and through bales of rags over which it was necessary to climb. As the door was opened, it was at first impossible to see the sorters because of the clouds of dust. As the dust cleared away with the inrush of air comparatively pure one caught sight of women, usually old, wrinkled and bent with toil, working without apparent definite aim upon the mass of rags with which they were surrounded. They were literally hemmed in by rags, the only bare spaces being the open trap doors, through which the sorted bundles were thrown to the floor beneath. In one place the broken panes of the windows were stuffed up with rags. In two there was no fire, though the visits were made in winter. In another, a small sheet iron stove, protected by a screen of tin kept the place more comfortable. The air in every case was foul and stifling. It is difficult to give an adequate picture of the conditions without seeming to overstep the limits of truth and nothing short of an actual visit to these places would be convincing.

The workers were the lowest grade, usually Poles and Russian Jews and almost all of them are middle aged. A few of them were far advanced in years. Only two or three young girls were seen and it was explained that these were newly arrived immigrants who would not be long in such employment. Some of the women who could understand German and were not indisposed to talk said that they did such work to help out the family income. One woman was a widow with six children. She worked from 7 to 5 o'clock each day and usually made about \$1

a day. She complained of a chronic sore throat. In one place the women were indignant at the presence of visitors and refused to talk at all.

The proprietors, in some instances, allowed an inspection of their payrolls. One place showed wages running from \$6 to \$10 a week, which may explain why any women will do the work. This same man complained that it was difficult to get rag sorters at any price. Younger girls absolutely refused to take such places. Another proprietor said wages in his place ran from \$4 to \$6 a week. The women keep their own hours, as the work is by the piece. Usually, however, they put in the regulation number.

A shop where waste paper was sorted employed more hands, and the conditions were slightly better, though susceptible of much improvement. The business was carried on in a warehouse, unheated except by two stoves, one on the upper and the other on the lower floor, and neither making any appreciable effect on the temperature of the place, as the outside doors were almost constantly kept open. The proprietor explained that the women did not mind the cold, as they wore extra clothing. There were fifteen women and girls at work. In one room they sorted the waste paper from binderies, filling great baskets with it. In another row three girls picked over heaps of waste paper from the department stores, stirring the mass up with brooms, so that a constant cloud of dust arose, while as the larger pieces were sifted out in the process the debris was swept into a chute, and dropping to the ground floor was caught in bags by men standing below, while two other girls stationed there swept up the falling scraps. Everywhere there was dust and dirt. As the baskets of paper were collected they were taken to a press where a man stamped down the paper with his feet until the hopper was filled. Then he with three women turned the handles until the paper was pressed into a bale. It was evident that it took considerable exertion, but the manager gave assurance that the girls were better off doing it than they were at most kinds of work "because the muscular effort required is exactly what you ladies go to the gymnasiums to get."

The wages paid were from \$3 to \$5, only two of the girls get-

ting the latter figure. Presumably most of them got the lower. There were no closets in the warehouse, as it had no water connection, and the girls were obliged to cross the street to the bottle department conducted by the same firm. The factory is located in the worst part of town. The girls were largely Polish.

SHOE FACTORIES.

Shoe making affords women workers about as varied and lucrative a trade as can be found. Wages vary almost as much as the personality of the workers who range from the ignorant, unskilled type to the intelligent, self-reliant, wide-awake young woman who is one of the best products of modern life. At least three-fourths of all the work that goes on in the shoe factories is being done by women. Men do the cutting and lasting and the heavier tasks in general, but practically all the fashioning of the uppers, all that calls for a delicate, expert touch, is in the hands of women who often attain a degree of skill that, if conditions were as they should be, would ensure them more than a fair livelihood. As it is, in this trade as in most others, there are drawbacks of one kind and another, chief among which is the irregularity of employment and a wage scale that, it is declared, has an almost imperceptible but steady tendency to decline.

The factories are as varied in conditions as are wages and workers. Some of them are fine, modern buildings, equipped with every possible convenience for the people under their roofs, and others are dilapidated, old structures, dark and dingy within and without, coming only within the letter of the law so far as sanitary requirements go. In some the machines are placed so close together, and whatever spare room there is is so occupied with stock, either completed or on the way to be, that the workers suffer much inconvenience. On the other hand, there are large commodious workrooms to be found, in which there is plenty of air and space and light for every one. One curious phase of this particular branch of industry are the small factories on the outskirts of Milwaukee, places that are but little more than home shops, with the proprietor's wife acting as bookkeeper or forewoman and the proprietor's relatives and neighbors running the machines. In such places the work done is usually of

the coarser, heavier sort, the finer grade of shoes being manufactured in the larger and better equipped establishments which are conducted on stricter, but more business-like methods.

When a girl starts to work in a shoe factory she usually is given a fair opportunity of learning the trade, and if she shows interest and intelligence she is rapidly advanced from one kind of work to another until she becomes a vamping, which is the goal of every operative's ambition. She passes through the various stages of being a table worker, cementer, ironer, dresser, lining maker, upper and lower leather closer, beader, edge stitcher, tip stitchers, eyelet stayer, foxer, until she eventually is given a vamping machine and is acknowledged to be an experienced operative. From then on she is practically sure of a job most of the year, and though she may waste a good deal of time both within the factory and out while waiting for trade to become brisker, she is no worse off in this respect than are the workers in most trades, while when she is earning wages she is making more than most other workers. At one factory the estimate on lost time in a single year was placed at one month; in another at two months. In one factory visited, where usually 200 girls are employed, but fifty were in the building and many of these were occupying their time reading and making fancy work while waiting for orders to come in from the office. A great deal of work is purely mechanical and can be mastered in a few days, but much of it requires years of practice and a constant desire to improve.

Wages varied from \$2.50 a week, paid girls doing table work, to \$20 a week earned by the forewoman in one factory. The scale for the various grades of work given at one establishment and presumably uniform for all the larger places was about as follows: Table workers, \$2 to \$4; ironers and dressers, \$5 to \$6; lining making, \$4 to \$8; closing upper leather, \$6 to \$8; second closing, \$8 to \$10; beading, \$5 to \$6; edge stitching, \$6 to \$10; tip-stitching, eyelet-staying, and foxing, \$7 to \$10; vamping, \$8 to \$12. These figures may be a trifle high and it must be taken into consideration that they represent what can be made on the best class of work, with the full amount of time allowed and with plenty of work to do. The average in every class probably falls considerably below these amounts. A forewoman in

one factory who had been in the shoe making trade for twenty-one years said that wages had fallen considerably in that time. When she had started out good workers could make as high as \$15 and \$18 a week doing the same sort of work that brings but \$8 to \$12 nowadays. She thought there was a tendency to grade the scale as close as possible to the \$9-a-week-point- that is to keep the best workers making about that figure, while of course the poorer ones fell much below it. Then, too, the amount of work required increased as the scale of wage declined. Something of the task system prevails in many factories, which set a certain number of pairs of shoes as the daily output. As each girl does only a certain part of the shoe it is necessary for all to work with some degree of uniformity in order that the work can pass from machine to machine as each piece is completed. In most of the factories fines are imposed for broken needles and spoiled work, and these often make serious inroads into the weekly earnings. Workers claim that often the amount of the fine is far in excess of the value of the goods spoiled and also insist that considerable injustice exists as to the methods of imposing fines. Those in charge of the workrooms exercise a good deal of power in such ways and are not always above displaying favoritism or taking petty revenge for personal grievances. On the other hand places were found where the very best relations existed between employers and employed, where no fines were imposed and where every consideration was given the worker. It must be confessed, however, that such places were the exception rather than the rule.

The hours of work were nine and ten a day according to the factory. In one the day had been reduced to nine, it having been proved that the output of the factory would be just as large and the workers preferring the shorter day. Contrasted to this was the condition in another place where the nearest approach there has ever been to a strike came from trying to install a nine hour day. The strain of keeping up to their usual earnings, while working a smaller number of hours was felt by the workers to be more than they could stand. After trying it for some time and becoming more and more discontented the girls circulated a paper stating that unless the ten hour day was reestab-

lished they would leave their machines the following morning. Every girl signed the paper which was presented to the head of the firm, who promptly restored the old working day. Out of this concerted movement, it is worth while noting, grew one of the largest and most flourishing trades unions of women in the state and a complete unionization of the factory is expected as the ultimate outcome. It has also led to the organization of a Union Label league in the town in question. On the other hand, the bitterest opponents of union life in one of the largest factories of the state were to be found among the girls who by a strike some years previous had been thrown out of work for eight weeks. A later reorganization of the union failed to enlist the women who when a second strike occurred refused to go out with the men and so held their places.

Taken all in all, shoe making seems to be one of the best industries in which women can engage. The work is rarely heavy and although it is confining it is no more so than most other lines of factory work, while the wages are better than in many industries. Unless, however, a girl is eager, ready and able to learn, the trade holds little for her, for the unskilled among the shoe makers are poorly paid and sometimes over worked. There are always plenty of such workers to draw from and consequently they can not always be sure of getting anything to do, but a good shoe machine operator is practically sure of always holding a position, more or less lucrative and reasonably secure.

One of the establishments afforded an opportunity for noting the extent and value of the "factory extension" work being carried on by the Young Women's Christian association in the city. A small library has been put in, noon talks are given and some class work is being carried on. The library is not so well patronized as the promoters of the scheme had hoped for, but the noon talks are most successful and always elicit the closest attention on the part of the girls. In another factory the proprietor is planning to use a vacant storeroom as a lunch room for the women operatives.

SOAP FACTORY.

At the soap factory visited about forty girls were employed wrapping and packing soap and filling boxes with washing soda. The last named was the best paid class of work and also the most disagreeable. The girls employed at it worked in a small room into which the washing powder descended through a chute from the room above where it was made. The girls were stationed at the end of the chute, their duty being to fill small pasteboard boxes with the powder as it came down in a steady and somewhat rapid stream. Naturally, they were obliged to work in great haste. One girl looked after the actual filling of the boxes, the others putting on the covers and labeling them as she passed them along. The air of the room was thick with floating particles of the powder which formed a cloud about the little group of workers, none of whom seemed to mind it, however, though visitors coming in from outside coughed and sneezed from the pungent fumes of the ammonia and soda used in the powder. The girl at the chute had her nose and mouth protected with a cloth, but none of the rest wore any head covering nor attempted to shield their lungs from the floating stuff. All the girls seemed fairly robust. The foreman declared that a soap factory was the healthiest place in the world because the lye in the soap "ate up all the microbes" and a girl who had worked in a knitting factory until threatened with consumption said that her health had steadily improved since she had gone into soap making. On the other hand another girl said her doctor warned her that her lungs were being affected by her work.

The packers and wrappers work by the piece and make about \$4 a week. The best packer in the place was paid a cent and a half a box for wrapping 100 cakes of soap, placing them in a wooden box and nailing the cover down. By hard work she sometimes packs sixty boxes a day, but she is the only one who makes such a record. The wages of thirteen girls filling out the schedules ranged from \$3.50 to \$6 a week, the average being \$4.75.

STRAW WORKS.

There are two establishments in Milwaukee manufacturing straw and felt hats of the ready-to-wear variety and during the busy season they give employment to 600 girls or more, most of whom, however, are laid off during the long periods of dullness that succeed the rush. A high degree of skill is demanded and though the ostensible wage is higher than in most industries employing women, the actual earnings are so greatly reduced by the enforced idleness that they are no larger than in other lines of women's work, if indeed they are so large. The work itself is light, pleasant and in every way adapted to women, while the factory buildings are fine, commodious structures, clean, well lighted and with good ventilation, their location in the outskirts of the city ensuring greater space than is permitted establishments nearer the business district.

The work consists in making straw and felt hats and trimming them for the trade. The blocking, varnishing, pressing and steaming are done by men, the girls reeling and sewing the straw braid and trimming the completed hats. A girl is started at "ticketing" at about \$2 a week and then goes into the reeling room where she makes from \$3 to \$5 a week. The work she does is somewhat fatiguing as the reels are turned by hand. Later she graduates into the sewing hall where her wages increase with her dexterity so that in time, when there is plenty of work to do and her working day is lengthened to twelve and thirteen hours a day to meet the demands of the trade, she may make as high as \$3 and even more a day. Ordinarily, however, her wages fall below that amount and when she makes \$2 she is counted unusually lucky. The best operators acquire their skill only after many seasons of practice. The dexterity they show is remarkable, as with only a plaster of paris model for a guide they can sew straw braid into any required shape with astonishing swiftness. The same is true, though in lesser degree, of the trimmers, who advance from the simple work of putting bands on sailor hats to intricate rosettes, bows and feathers, making from 75 cents to \$1.25 a day.

The great drawback to the trade is the long dull season, last

ing usually from May to December. The straw workers are most affected, as the trimmers are kept longer in order to get out the felt hats, the making of which does not require the services of the straw operators. A recent fashion of using felt and chenille braid gave longer periods of employment to the operators, as the work could be done on the same machines as those used in making straw hats, but the fashion passed and work fell off. A still more recent fashion which has led to the importation of native hats from the Philippines and Cuba threatens to affect the straw workers' business by curtailing the amount of work given them to do each year. The operators deplore the new style, saying that it brings them into competition with peasant girls of foreign countries who work for mere pittance on which American-bred girls could not exist.

During the busy season the factories often run over time, and at one the operators are divided into shifts which take turns week and week about at night work. At such times the operators make good wages, but as the season advances earnings decrease. Operators themselves estimate that they do not average more than \$7 a week the year round. The pay roll of one factory proved this, as the average weekly earnings of the 107 girls being carried at the time of the visit, which was made during the first part of April, came to \$6.29, the individual earnings running from \$1.50 to \$12 a week. The general range seemed to be from \$6 to \$9. The reelers averaged \$2. The trimmers made about \$1.25 a day. The average season for the operators the manager of this factory estimated at not over five months. He said that the opportunities were so poor that he was continually being astonished at the fine class of girls attracted to the work.

The girls in discussing this long dull season said that those who could found employment in other factories. Some girls were able to combine the two trades of hat-making and fur-sewing, as the season of one followed the other. Others find work in the knitting factories. A few try housework, but the majority, living at home and being under small expense, put in the time sewing for themselves or their families. The worst feature, according to the girls' points of view, was the necessity

of going day after day to the factory as the season begins to wane. There is no way of telling what orders may come in and so the operators gather to see what the morning mail will bring. If no work is forthcoming they go home to return in the afternoon on the same quest. This goes on for some time before orders for hats finally cease, and with the straw work out of the way the factory management begins to plan out its felt season. In dull seasons the girls do a great deal of fancy work while waiting for work, but none of them find a profitable sale for it. The trimmers get along better than the operators, for while their wages are never so high in any one day they have not such protracted times of idleness. At one factory 190 girls are usually turned away in May and are not taken on again until December. The green hands suffer the most. When a girl first gets a machine she is given a case of coarse straw hats to make. This nets her about 72 cents, and takes her about a week to do. But by the time she has finished the case she has learned to operate her machine and before long can turn out a case in a day. It takes a year or more for her to acquire any real proficiency or skill, however, and a still longer time before she is put into the favored class which is kept at work as long as possible.

The girls seen were of the best type of factory workers—intelligent, self-reliant and courteous. Germans and Americans largely predominate. Among the trimmers trained milliners can be found, but it is said that they do not make better workers because of such training as in trimming a ready-to-wear hat it is fidelity to copy and not ingenuity to create that tells.

Both firms provide gas stoves for heating coffee and tea at noon. The dressing rooms were fairly good and all of the work is done seated.

TINWARE FACTORIES.

Girls seem to have superseded boys in the tinware factories to a great extent. In some of the establishments boys are still employed to run the machines on which the tinware is cut and pressed, but in others girls do even this work, unsuitable as it

may seem to be. In all the factories the girls do soldering, japanning, painting, varnishing, stenciling and inspecting. The girls who solder are responsible for making water-tight the seams of the various utensils brought to them to be soldered, and flaws in their work are detected by the inspectors whose work consists in plunging these completed articles into hot water, noting by the formation of air bubbles the presence of any leak. The solderers frequently burn themselves with their soldering irons and injure their hands with the strong acid which is used to clean the tin before submitting it to the solder. Most of them wear their hands bandaged to prevent the acid touching the skin. There are fewer accidents from either source than might be expected as the girls become expert in the use of the soldering outfits. Girls who varnish cans complain of the fumes and smell, but say they soon grow accustomed to both and their health is not affected, and girls who operate presses occasionally suffer a smashed finger.

The conditions in the factories vary. Some of them are immense establishments, covering several blocks and employing hundreds of workers. As a rule these larger places were better from the sanitary point of view than the smaller ones, which were dark and dingy, poorly ventilated and with insufficient light. In the larger places it was noticed that the strictest discipline was maintained, fines were imposed and the individuality of the worker reduced to the lowest degree. This could be noted in the stolid, unenthusiastic way in which much of the work was done, though such an impression might also be traced to the evident fact that the workers were of the less intelligent class, most of them being either foreign-born themselves or children of foreign-born parents of the peasant type.

Wages were various in amount. Of the twenty-six workers making definite returns the scale ran from \$2.25 to \$9, the last sum being the salary paid a forewoman. The average was slightly over \$4. The scale in one factory was as follows: Soldering, \$3.50 to \$7.50; painting, \$3.50 to \$6; japanning, \$3 to \$6. In another it ran from \$2.50 to \$5, all being piece work. In a third it ranged from \$2.50 to \$4. The japanners and painters were paid the highest wages. They seemed to re-

gard their work with more pride than did the others. One girl who painted lard cans, using a stencil design, said that she always told people she worked in a "decorating establishment." Some of the best japanners said they could average \$1.25 a day if work was steady. If, however, they made \$1 they thought they did well. Many of the older workers had had wide factory experience. A girl operating a press said that she liked the work better than making fur coats though the wages were much less. Still in the fur trade there were long seasons of no work at all, while the tin can factory was busy all year around. Another girl said that her health had broken down in a knitting factory and she found soldering more healthful. A third was working merely during the dull season of the tobacco factory, where she could make better wages.

The hours were usually ten a day. One factory ran from 7 to 5:40, with half an hour at noon and ten minutes in the middle of the morning for lunch, and two hours less on Saturday afternoons. One factory closed down a week at Christmas to take stock and all hands get a vacation at that time.

In commenting on the fact that girls are pushing boys out of their former places in tin-ware factories, several managers of large plants said that they had tested both sexes and found that girls were much more conscientious about their work and were more to be depended upon. The only objection to be raised to them was that it is harder to advance them from place to place. When they had once learned to do a certain kind of work they preferred to continue doing it rather than go to the trouble of acquiring something new, even if the new work would pay better. He explained their lack of ambition on the ground that as most of them had no control of their wages any way it made little difference to them how much they earned.

TOBACCO PACKING.

At certain periods of the year hundreds of girls in Wisconsin find employment in sorting and stripping tobacco, but the present report takes no cognizance of that particular phase of the whole industry as it is supposed to include it in a second and

more detailed investigation to be made later. Tobacco stripping and sorting are carried on in the districts where the tobacco is grown and are subject to certain peculiar conditions arising both from the environment and from the fact that the work is a seasonal occupation. For these reasons it is distinct from tobacco packing, as it is carried on in the few large factories located in Milwaukee. It is the latter class of work that is under present consideration, and while it gives employment to a comparatively limited number of girls it has certain aspects that make it of unusual interest.

These tobacco factories as they are found in the city vary as to sanitary conditions, wages, hours and the demands made upon the workers. In one place, a large factory, only fifteen girls were employed and these worked under conditions that were as good as it was possible to make them. Contrasted to this was a second factory almost within stone's throw, where just the reverse was true. In the first factory improved machinery has been put in so that the actual work of packing is done automatically, the girls merely putting in the right amount at one end of a revolving belt arrangement by which the tobacco is carried down the length of a long table, on either side of which sit other girls who fill, stamp and seal the packages, the work being as light and the conditions as good as could be asked for. In the second factory, on the other hand, where nearly one hundred girls are employed all the work is done by hand, and though long practice has undoubtedly brought individual expenditure of muscular strength to as small a degree as possible yet everything went to prove the work most exhausting. The packers were obliged to pound the tobacco down into the packages as tight as it was possible to make it, using heavy wooden mallets which they wielded with considerable force. Many of them worked like automatons, with swift, nervous movements, each one of which told in the rapidly accumulating heap of packages on which the packer's daily wage was estimated.

In this second factory all the work was done under electric light, as the place was little better than a warehouse so far as daylight and air were concerned. Half the girls worked on the lower floor, the other half in a gallery built around the wall and

reached by a narrow, crooked, wooden stairway. At noon the dynamos stopped running and the place was in darkness, except for the gas jets at which the packers melted the wax used in sealing. In this dim, flickering light they ate their luncheons and spent their noon hour, not deeming it worth while to dress for the street. They complained of the almost unbearable heat in summer, as there are days when it is impossible to open the windows on account of the wind blowing the gas flames. At all times the air was heavy and close and combined with an all-pervading odor of tobacco made it difficult for outsiders, at least, to breathe in any comfort.

In both factories the eight hour day prevailed, in one because the place was under union regulations, in the other because conditions have been more or less affected by union life though it is not officially recognized. In the union factory work begins at 8 and stops at 5, with an hour at noon and Saturday afternoons off. In the other, Saturday afternoons are earned by adding a half hour extra to the regular eight-hour day.

Wages are fairly good, especially in the union factory, where a girl can usually make about \$4 a week at the start. All work is paid by the pound, and a girl's wages increase with her rapidity until she can make \$7, \$8 and \$9 a week. In the other factory all wages were paid by the week and ranged from \$3 to \$7, the oldest worker being the only one paid the latter amount. At one time she received \$9 a week, but wages fell and hers with the rest. The present average for the establishment was about \$5.

A good deal of overtime work is required in these factories, but is always paid for. In the smaller one, whenever night work is asked, the girls are taken in a body to a good restaurant and given a warm dinner at the expense of the firm. The same firm, while not allowing vacations with pay, still sees to it that girls needing rest get it and girls who fall ill and who have no homes are taken care of.

TOY FACTORY.

In the toy factories girls do varnishing and painting, some of the lighter carpentry and most of the packing, all work that was formerly done by boys. In the place visited some thirty girls were employed at painting croquet mallets and balls, varnishing and painting sleds and toy wagons and in wrapping all these articles for shipment. The hours were ten a day, except on Saturday when but nine hours were required. The wages were small. Painters were paid from 65 to 85 cents a day, only the girls who did striping and stenciling getting the higher figure. Girls who nailed canvas to folding stools and seats were paid 35 and 40 cents and packers 40 cents a day. The head of the firm said that though boys were employed up to within a short time the change had not been made on account of a difference in the wages paid the sexes, since the scale was the same as it had always been. Girls, however, had proved themselves more reliable than the boys and were not possessed of the constant desire for a change that kept the latter roving from factory to factory in search of new work.

TRUNK FACTORY.

The trunk factory visited was not the largest of its kind in the city, but may be regarded as fairly typical. About thirty-five girls were employed in it, making telescopes, lining trunks and sewing the linings for traveling bags. Most of the work was done with paste. In making the telescopes the pasteboard foundations were cut out on machines operated by men, folded into shape by girls, and passed through stapling machines, also operated by men. Girls then pasted in the linings. In the trunk-making department, girls were employed pasting in the muslin linings and covering the trays with paper. The girls who made bag linings worked at machines operated by steam power, their work being merely to run up the seams of cloth cut into the desired shape. All the work was purely mechanical, requiring but little skill though considerable neatness and dispatch. Many of the girls had been in the factory for years,

in spite of the fact that the highest wage reported by twelve making definite statements was \$5. The average wage of the twelve, the scale of whose wages ran from \$2.75 to \$5, was \$3.70. Three of these made \$5 a week, one \$4, three \$3.50, one \$3.25, three \$3 and one \$2.75, which is probably about a fair range.

WATCH FACTORY.

The fact that the only watch factory in Wisconsin was less than six months old at the time it was visited for the purposes of this investigation made it peculiarly interesting to note the degree of skill attained in that short period by the women operatives, most of whom were green hands impressed from domestic service and still in process of training for factory life. There were, in all, about fifty women employed, engaged for the most part in running the various drilling, cutting, grinding and polishing machines on which the different parts of a watch are made. The work was apparently easy so far as physical exertion on the part of the operator was concerned, but it must have been exceedingly nerve wearing on account of the minute size of many of the screws and bolts turned out. Some of them were so small they could scarcely be seen with the naked eye, yet each had to be polished and grooved with perfect accuracy, and the worker's wage depended upon the number of these infinitesimal articles she turned out in a day to the satisfaction of the inspectors. Much of the work had to be done under magnifying glasses, but strangely enough the girls did not complain of any ill effects. All had been troubled with headaches at the start but these disappeared as they became accustomed to their work. Evidently nature adjusted the eye to its task. The filing and polishing machines were fitted with glass shields so that the workers were protected from any flying bits of brass.

Wages were not especially good at the time of the visit, ranging from 50 cents a day, at which figure a girl was started, to 75 cents, the highest amount then being earned. The manager of the concern said, however, that in a short time good operatives should be making from \$1.25 to \$1.50 a day, otherwise he would not consider that his machines were being used to

their greatest capacity. He had in view a scheme for profit sharing in which he intended all the workers in the factory, girls included, to participate. This, he thought, would tend to enlist a keener interest on the part of the employe and would counteract the dulling effects of monotonous work.

The factory was a model in arrangement, and being almost new was attractive and clean in all its appointments.

A curious thing heard in connection with the place was its waiting list. When the factory started, nearly every servant girl in town applied for a position. Out of the applications the company selected those who seemed most desirable. The rest were put on a waiting list, and at the time of the visit perplexed housewives about town, searching for domestic assistants, turned to this list for addresses.

WOOLEN MILLS.

There are several woolen mills in the state which employ in all some two or three hundred women and girls. In a few only worsted yarn is manufactured, but in the others the yarn is both spun and made into cloth, the process affording a variety of occupations, adapted both to the young and to the more mature workers and being recompensed on a varying scale of wage, the lowest point of which is pitifully meager, while the other extreme represents about as high an amount as women are commanding in factories today. Skilled weavers are always in demand and are reasonably sure of making a fair livelihood, and it is an occupation in which women not only do as good and rapid work as men but in which there is little of the discrimination in wage which is met with elsewhere. It is not, however an easy life. Weaving means standing at the loom ten and eleven hours a day, with eyes alert to catch the slightest deviation in the running of the thread, while the roar and clatter of the machinery is almost deafening to any one unused to it. Weavers say that they speedily become accustomed to the noise and think nothing of it, pursuing their tasks with no more nervous strain than if everything was perfectly quiet, and this is probably true, though it is also true that weavers proverbially

look worn and weary as if the strain placed upon their nerves had its effect even if they themselves were unconscious of it.

There is usually a great range of wage in such places. In a mill manufacturing only worsted yarn, the scale was as follows: Helpers, who were little girls employed in putting empty spools on the machines, 35 and 40 cents a day; spinners, 45 cents for a single row of spindles, 55 cents for a double row; combers, 65 for one machine, 80 for two; gill box minders, 50 and 60 cents; reelers, from 65 to 90 cents according to amount of work done in a day. The latter was the best paid class of work in the establishment where 140 girls were employed. In another mill spoolers and spinners were paid 80 cents a day; girls who set up the warp, \$1.12½; weavers from 75 cents to \$1.25, according to amount of work turned out. In a third place, a girl started to work at 42 cents a day and often worked a long time at that figure before getting a chance to run a loom on which, with practice, she could make from 75 cents to \$1.50, the latter amount being the earnings of the very best workers who had charge of the wide looms. In this last place about three months a year the workers were laid off.

Almost all the work requires constant standing. The girls who run the spinning jennys rarely sit down. In few of the factories is any provision made for even the few moments of rest which a worker might snatch. In one, benches were placed at the end of the jennys and the looms so that when a girl could find time to sit down she might have a seat near at hand. There can never be long periods of rest, however, as the work requires constant supervision, and, especially when a long row of spindles is under supervision, necessitates a continual walking back and forth to tie up broken threads and keep the spindles running true. Some of the spinners have had as many as 200 spindles to watch.

A good deal of dust arises from the wool, and that taken with the confinement makes the work more or less objectionable on the score of health, but most of the mills were in fairly good condition. The largest of the mills was located in a modern and sanitary building, with good light and air, but many of the

smaller ones were deficient in both respects, and in one or two there was a good deal of crowding of machinery and workers.

The working day in these mills seemed to be considerably longer than in most other lines of factory work. In one the regular hours were from 6:30 a. m. to 6:15 p. m., with an hour at noon, but Saturday half holidays in part compensated for the extra time demanded. There were women working in this place who lived several miles from the mill and who walked to and from their work, being obliged to start before 6 o'clock in the morning to be at their machines when power started. In a second mill the hours were from 6:50 a. m. to 6 p. m., with an hour less on Saturday, but with no half holidays. In a third the hours were from 6:45 to 6, with an hour at noon and an hour less on Saturday afternoons. Some of the mills had formerly required a straight eleven-hour day the year around, but this was abolished a few years ago. The workers were of all ages. The spoolers and spinners were often young girls in their teens, while middle aged women who had spent years in the mill were to be found at many of the looms. Some of the best workers reported having been employed in the same mill fifteen and twenty years.

PART VII.

Free Employment Offices.

INTRODUCTORY.

Free public employment bureaus were established in Wisconsin in response to an economic, rather than political demand. For a period of one year two such offices have been maintained under the direction of the Bureau of Labor and Industrial Statistics—one being located at Milwaukee, the other at Superior.

These offices have not existed long enough to furnish a basis for definite conclusions as to the ultimate results but the indications are that there is in Wisconsin a place for such institutions. From the first the free offices were patronized to a very considerable extent by both employers and unemployed and with quite satisfactory results. In the first twenty-five weeks there were received 4,605 applications for work and 4,618 for help. The agencies were able to fill 3,808 positions from those lists. There have been several elements that have hindered the success of the offices more or less, and which may in time be eradicated. In some quarters there has been a slight opposition on account of aversion to state activity in this direction; in some respects a lack of necessary equipment has hampered the bureau; no appropriation for proper advertisement was made, which has been a very material drawback; moreover, times have been good and workmen have found comparatively little necessity for calling upon an employment bureau for assistance in getting positions.

But why have such offices as these been brought into existence ?

Many states have recently passed upon that question. Generally speaking, it can be said that the real purpose of these offices is to provide facilities that will enable those who are looking for work and those who are looking for help to be brought together with the minimum amount of trouble and expense. They are intended chiefly as a help to the working classes by enabling those who are out of work to find employment with the least possible delay and without paying a fee such as is charged by private employment agencies for similar work.

That there is need of some such institution is certain. Proof of the fact is easily obtained. In most places, especially in the larger cities, it is not an easy matter for worker and employer to meet. The reasons for this are found principally in the conditions under which the productive enterprises are carried on and in the fact that these enterprises are scattered. A workman often is compelled to spend days, if not weeks, in walking from place to place before he finds one requiring the kind of services he can offer. Even where work is plentiful this is true and the employer often suffers more or less inconvenience from the same cause. Thus a great deal of waste results. Labor cannot be stored up and the time lost by the worker in looking for work is not only a loss to him but to society as a whole. If his labor be not expended at the time, that labor cannot be expended at all. This is not merely a truism; it is a patent fact. It is this that makes unemployment one of the greatest of social evils. Free employment offices tend to minimize the evil and would from this point of view, even if from no other deserve some attention.

But in almost every city there are private employment agencies which make it their business to procure employment for those desiring it. These agencies are, however, private institutions. They are organized for the purpose of making money; that is their first object and the enterprise seems to be a success as a money maker. Laborers who are out of work patronize them well and pay for the services, real or supposed, that the agencies render in assisting them to positions. Undoubtedly these institutions do find work for a great many and they thereby prevent a great deal of waste that would occur were the laborers thrown entirely upon their own resources.

Serious objections, however, are made to such agencies. The services they render the working people are, on the whole, very largely offset by the charges made, charges that come out of the pockets of the unemployed and which often amount to a very considerable sum. Fees are charged at every turn. In the first place there is a fee for the mere registration of names, and very often this is done when there is not the slightest chance of securing positions. If the applicant eventually does get a job he has literally paid for it.

There are many other objections to the private agencies and many of them much more serious in character. These do not necessarily apply to all the private agencies but they do apply to a great percentage of them, their only purpose being apparently to get hold of the dollars of the unemployed and to keep hold of them. The very fact that renders the unemployed so needful of money makes them also easy victims so long as they have any left. The system adopted by many agents for extorting what funds these people may possess resembles the methods of pawnshops more than those of any other business. Many honest agents, no doubt, do conduct employment bureaus upon methods as honorable as could be desired but the odium that has resulted from numerous rascalities is sufficient to cast a shadow of distrust upon the business as a whole.

Plenty of illustrations may be found. It often occurs that, having received the registration fee, the agent's interest in an individual case at once ceases. Many agents form a sort of conspiracy with employers, the object being to maliciously squeeze money out of the workers. There are many ways in which agents and employers can work together and by dividing the fees make a considerable income while actually doing less than rendering no service at all.

Among agencies located in the greater industrial centers which contain a large and floating working class and where many small and irresponsible contractors obtain their supply of labor, such practices are most common. In such places the workers are both hard pressed and ill posted as to the real circumstances. Very often their supply of bread depends upon their immediate employment, and each worker may have several others depend-

ent upon him as well. The result is that so great is their anxiety to obtain work they will grasp at almost any straw of hope and will submit to almost any inconvenience or imposition that promises to bring employment. Being unable to understand the full import of the operations to which they are subjected they are easily imposed upon, and unscrupulous agents do not hesitate to take full advantage of this fact. Wherever the opportunity exists it is safe to assume that there is no lack of unprincipled men who are eager to secure the premium offered for their shrewdness. Attempts have been made to give protection to the victims of such schemes through the law, but laws enacted for the regulation of private employment agents do not seem to have helped matters much. The difficulty is that their actions are so easily covered up that it is well nigh impossible to obtain evidence upon which they can be convicted.

The schemes for extorting money from the unemployed are as numerous and varied as are the conditions that lead up to the extortion. The principle underlying them is the same—to deceive the victims into paying for supposed services. Different localities are suited for different sorts of such swindling games and the most successful agent is the one who is most ingenious and plausible in his devices. Some specific instances illustrate well the cleverness of the different systems. A few such may be related here as examples of the methods private agents have been accused of practicing in some of the cities of this state.

Application for work was made at one of these private offices, by a workman who had barely the necessary dollar to secure the position which was open. Having paid the fee he was sent by boat to a lumber camp to which the fare was several dollars. The man did not have the fare but according to an understanding between the lumbering firm and the boat people, he was carried to his destination. There he was put at work but in a couple of weeks or less was laid off. In his accounting with the company he found that what was due him was just enough to offset the claims on account of his trip, and he was left penniless to make his way home as best he could. He had earned his board meanwhile but was actually money out on the transaction.

Complaints have often been made to the effect that employers

or "bosses" who pick out men for employers have made a business of working in conjunction with employment agents. By a system of hiring and discharging men they make 50 cents apiece or half the fee from each man thus hired. For example, a logging contractor near Superior turned in an order to the free labor bureau there, which was then being operated by the city. The bureau procured about 70 men, nearly enough to fill the order, so notified the contractor and had the men at the depot at the appointed time. Meanwhile the contractor fell in with a Duluth private agent and for some reason permitted him to nearly fill the order, even after notification had been sent from the Superior bureau. The result was that some 50 men were turned away at Superior, their places having been taken by other men hired later. Many of the disappointed men had been counting upon this job for a day or more and may have meanwhile passed by other very good positions. However, in this case they may have been fortunate for it was but a short time before some of the men who had been sent out were back again looking for new jobs.

Again, railroad employes who have been in charge of the hiring of men for surface work, etc., have taken advantage of their positions to make profit from the jobs they had at their disposal, and the private employment agencies prove very convenient allies in these dealings. Men have been turned away from railroad offices on the plea that there was no need for them, when in reality there was a great necessity for men. These same men have gone to private employment offices, paid their fees and gotten the jobs they sought. The railroad agent could not charge a fee directly, so this method was taken. Of course, such practices stop when a higher official becomes aware of them but very often the victims do not realize what the process has been, or if they do realize it they are scarcely in a position to demand redress.

But the private agencies have not limited their operations to individuals. There have been many instances where they have been able to prey upon railroad companies. One agent is said to have done a very paying railroad ticket business by virtue of his having had an order from the company. The order was

placed for a large number of men to do work on the line 100 miles or more from the city in question. The agent had the authority to issue his employment tickets which were honored by the passenger train crews for passage to the point where work was in progress. The agent would occasionally send out a crew of men who would actually accept the jobs offered and would work at least for a short time, but he would also pass out or sell to his friends or others, employment tickets entitling them to the free ride and job whereas the buyers never had any intention of taking the proffered work. This scheme was worked by one agent even after the railroad company had notified him to send no more men. The company had not supposed it necessary to notify their train crews to stop carrying men, so the traffic went merrily on. One such experience between a company and any one agent suffices, but it is only one of the many possible methods of making money at the expense of and to the great annoyance of the company.

Where two labor centers are within working distance, as is the case with the Twin Cities and the head of the lakes, agents in one place and their correspondents in the other are able to work to great advantage, especially among men who have money enough to pay railroad fare from one place to the other. Cities with a state line between them, such as Superior and Duluth, afford great opportunities also. The district attorney in the former city was not long since called upon to threaten a local private agent with legal prosecution unless he would refund money collected from a party of unemployed workmen. The men had been sent to a Duluth office where they were supposed to get positions they had paid for in Superior. The Duluth office was prepared to turn them away but after losing a great deal of time and some car fare, they succeeded in getting back their original fee, being aided by the attorney.

The fact that the four cities referred to afford such a good field for private operations, indicates that with free public employment bureaus in all places and all working together a very sensitive and comprehensive piece of machinery would be at the service of the unemployed. During the harvest season, the seasons of railroad work, logging and other great sources of em-

ployment in that part of the country, the free bureaus would aid greatly in giving relief from surplusages and shortages of labor in the different sections. The men could trust disinterested bureaus not to send them where there was no work and in case the applicants had no money with which to pay fees, that fact would not at all interfere with the distribution of the workmen according to the legitimate demands. Any motive for deception on the part of employers would also be eliminated.

It has been urged against free employment bureaus that they help to bring men to the industrial centers when there is no demand for them there—that a free employment bureau would act as sort of a loafing center. On the other hand such statements are contradicted by advocates of the free employment bureau plan. Instead of unnecessarily bringing the unemployed to centers where there is no work, it is maintained that they tend to do the reverse, that with a well organized system of free bureaus in different centers those seeking work would be able to get true and unbiased information as to the status in the different sections. The bureaus would serve as information as well as employment offices; they would bear somewhat the same relation to labor and the laborers that the produce exchange does to produce and the venders of produce.

These instances show the trend of affairs in regard to private employment offices and they are sufficient to prove that these agencies cannot as a rule be safely trusted to deal with the laboring classes—that for this reason they are likely to become to the community more of a detriment than a benefit. People are becoming aware of this fact and this in turn has created a sentiment that in many states is largely responsible for the tendency to place this work entirely under state or municipal supervision, through the establishment of free employment offices.

Private agencies so conducted as to injure any person or class of persons would be driven out of business. To do this is one of the purposes for which free offices have been established, but it is doubtful whether they can fully accomplish this. It is not easy to disturb these agencies; their methods may be questionable but their ways are dark and their means of securing business are difficult to reach. So far the free employment offices have suc-

ceeded in taking away only a part of their patronage. It is apparent that some stronger force than mere opposition from free employment bureaus is needed to protect labor from the impositions of private agencies. In fact, it seems likely that these agencies will, at least a portion of them, continue to exist and do business until completely prohibited by law. Yet the free agencies can undoubtedly accomplish a great deal; they can by dividing the patronage relieve many a laborer from the necessity of paying fees and from the danger of fraud. Of necessity also, the private agencies when in competition with free agencies would be compelled to eliminate more or less their underhanded practices. Thus the free bureaus are serving not only to ameliorate the condition of the unemployed but also to show in their true light the unprincipled agents, enabling legislators to act with much more intelligence in framing the laws which are aimed to better conditions. This latter fact is of more importance than first thought might presume. While much is known regarding the practices so much complained of, there are a great many matters in regard to the establishing of new bureaus and the abolishing of old bureaus upon which there is not at present sufficient accurate and detailed knowledge. Intelligent action can only be expected when the situation is fully understood.

There are many questions that must be better understood before free employment offices can render their best service. One of these relates to the applicant for employment, another relates to the applicant for help. Each of the parties has a right to know something about the other. The employer desires to know whether the man he employs is efficient and honest, whether he is trustworthy and reliable. All this is of great importance to the employer. In turn, the workers have a right to know something about their prospective employers and this right should not be limited to the immediate terms of the employing contract. The employe should also be entitled to ask, what kind of a man is the employer? Is he responsible and disposed to be fair, or is he likely to take advantage of his position in his dealings with those in his employ? These questions vitally affect the worker and his family as well; he cannot afford

to overlook them. Yet as matters now stand the very nature of the situation makes it more politic, as a general rule, for the free employment agency to say as little as possible about either party to the transaction. The agency is between two forces. There is bound to be dissatisfaction. Some will complain under any circumstances and will perhaps attach to the bureau blame that should rest elsewhere. It is difficult for an agency to learn of the actual conditions everywhere existing and it may often be impossible to give reliable information. Loss of confidence in the bureau is likely to result. Many will also refuse to deal with a bureau that insists upon inquiring too minutely into their standing and their business affairs. The only way to secure the patronage of such persons is to ask as few questions as possible when the applicant has the option either of dealing with the free employment bureau or of transferring his patronage to a private agency.

When such conditions prevail it is evident that the right and the wrong of matters have little bearing upon the case. It is rather a question of expediency, and the Wisconsin free employment agencies have endeavored to be always upon the safe side of expediency; their object has been confined to the bringing together of the parties wanting work and those wanting workers. While the applicants are requested to fill out application blanks which would necessarily furnish many of the facts in question, there is nothing obligatory about the request; it is in no sense made a condition upon which the bureau is to do its best to procure the desired help or position. The rule is to treat all alike, to endeavor to give as complete satisfaction to those who furnish the information as to those who do not.

Then there is the business phase of the free employment offices, and this phase should be given careful attention. For some reason a large proportion of unemployed workers have often held aloof from patronizing the free employment offices and it has been noticed that this is true especially of the more efficient workmen. The only reason that can be assigned for such an attitude on the part of these workmen is that to a greater or less extent they look upon state free employment bureaus as charitable institutions. That such an impression

should obtain is probably due to the conditions that prevailed during the last industrial depression. At that time there were many offices maintained the purpose of which was to give relief to the unemployed, of whom there were great numbers. Such charity work took the form of employment finding as well as the giving of direct relief; often the two functions were combined. Hence the impression that anyone procuring employment free of charge was extending charity. For those thus impressed it would naturally be hard to look upon free employment bureaus as a business proposition. They could hardly be expected to regard the maintenance of free employment bureaus as much a state or municipal function as is the function of providing protection against crime or fire or the maintaining of bureaus of information for any other purpose.

It is of utmost importance that this impression be completely effaced and as soon as possible for it works injury to the cause. Just how to overcome this, however, is not easily determined. Probably one of the most effective remedies would be the application of strict business methods; and such methods would do much more than that—they would contribute greatly toward gaining the good will and confidence of the public in general.

The very fact that state activity in the line of establishing free public employment bureaus is of comparatively recent date, would naturally make them the object of more or less discussion and criticism. It is urged by some that the results so far have not been such as to justify the state in sustaining such agencies; that it is not a legitimate function of the state to furnish employment to the unemployed.

The question being an economic one is one that has demanded more or less the attention of every civilized government. A government is supposed to be a servant of the people, both employers and employed, and any way in which the state can serve these parties by bringing them together to their mutual benefit should be a legitimate state function. The question then becomes: Is the state in such capacity capable of serving the people better than any other agency?

The propriety of state action regarding paupers, the insane and criminals is not questioned; and yet who can say how much of these very conditions are produced by enforced idleness? If it is a proper function of the state to care for the unfortunate victims of idleness should it not also be regarded a function, even a duty, of the state to prevent such conditions by assisting to employment "those who are willing and able to work"? It could hardly be maintained that the state should be charged to cure, yet not permitted to prevent a disease.

Recognizing this, England, Germany, France, Russia, Australia, New Zealand and about one-third of the states in the United States have some form of free employment bureaus either under state or municipal control. Civilized nations are realizing that new conditions must be met by new legislation; and the apparent increasing tendency of men to assist their fellow men in the struggle for existence is one of these conditions that has a foundation both ethical and economic. The complexity of our industrial society, the division of labor which tends to make every laborer a specialist, the industrial revolutions caused by the introduction of new machinery and new methods, throwing men thus out of lifelong employment to undertake new work—these things are continually calling the attention of the public and of the legislative bodies to the needs of the laboring classes. The last session (1901) of the Wisconsin legislature gave evidence of this fact. At that session was passed, among others, a law providing for the establishment of free employment bureaus under state control.

Experience has shown that along certain lines individual interests can be best served by the community acting as a whole. Often, indeed, such action has proved necessary to the success of the undertaking. This being true it is not only a right but an obligation resting upon the state to assume control of any institution "where public welfare can be most readily and speedily promoted." The free employment bureau is held to be one of these institutions.

The Illinois Commissioner of Labor said in his last report: "Idleness naturally leads to criminal pursuits, and an idle man belonging to the class who must work in order to live is a menace to the public. We have advanced sufficiently to accept the dec-

laration of Cardinal Manning, that a starving man has a right to his neighbor's bread, and when the opportunity to earn daily subsistence is taken away the means of support will be secured by other methods. It is these 'other methods' that constitute not only a source of expense, but danger to every community, and which the state, by this form of interference, has endeavored to remove.

"The *individual* plan as represented by the private employment agencies has justly been voted an unmitigated curse. People who conduct such institutions are moved solely by the instinct of personal profit, and many of them, as experience has shown, have moved from place to place in large cities, accepting fees from poor, unsuspecting applicants for work, with no purpose of furnishing work. There is scarcely a private employment agency that has not exposed itself to criminal prosecution, and only official indifference to a strict enforcement of the law has saved their managers from serving time in the prisons in the state.

"This is a serious charge to prefer against some of our fellow citizens, but the testimony of thousands of men and women who have been robbed of the few dollars they could ill afford would fully support it. That part of the population, however, who have no 'last dollar' to pay for a promise of work, and who are likely to form a dangerous element in a community, are precisely the class who can get no aid from the sharks in charge of the private office, and whose necessities can only be reached and relieved through the free offices under the management of the state. This is the important reason and sufficient justification for the free offices. To aid deserving men and women to obtain employment is a public obligation and one of the highest functions the state can exercise."

It is perhaps true that the vast amount of vagrancy in the United States is due, not so much to a lack of work, as to a lack of knowledge as to where the work can be obtained, and the free offices are the only institutions that can fill in the gap existing between the man who wants to buy labor and the one who has it to sell.

In addition to being of special value to the unemployed,

free employment offices assist those already employed in securing better positions. They will also aid the young man starting out in life in preparing for those occupations where the greatest demand for labor exists.

That there are evils in the private employment agency system was long since testified by Commissioner Peek of the New York Bureau of Labor Statistics, who said in his report for 1886: "A recent trial reported by the New York papers shows that a young fellow or a recently arrived immigrant can go to one of these agencies professing to have connection with the great employers and for \$5 get his name put on the list. The agency, of course, has no more direct or legitimate relations with the big employers than it has with the state officers, but it sends out an agent or two to inquire about changes and vacancies present and prospective. The agency watches the advertisements and sends out its circulars, and the candidate for employment can call at the agency to meet other candidates and to be told that if he had been there an hour earlier, or 'yesterday evening,' he would have had one of three or four chances just filled. There is not a spark of truth in all these utterances, but they keep hope alive until the applicant really picks up something for himself or quits the city in disgust. In brief, the employment agency is one of the many traps and springs of the metropolis set to catch the heedless and inexperienced and teach life's hard lesson."

Such complaints are by no means confined to any one section of the country. The labor commissioner of Iowa, after making a careful investigation of the private agencies in that state said of them: "Nowhere in this great state can be found a more perfect expression of man's inhumanity to man than is embraced in the pernicious methods of our so-called employment offices. The song of the 'Spider and the Fly' never found a more fitting illustration of duplicity than is found in the management of most of these offices. They allure the honest and unsuspecting laborer into a web of confidence surrounded by sympathy and false promises, only to rob him of his earnings and turn him out disappointed and destitute."

Among instances of such practices, coming from various

sources, is one concerning a saloon keeper who advertised for 200 men to go out to do railroad work. He thus kept a large crowd around his place of business all day and late at night received what purported to be a telegram with the information that they could not be sent out that day. Of course the jobs eventually fell through.

Another saloon keeper conducted an agency for women and used it as a decoy which lured young girls to ruin.

Such are the institutions and such the schemes against which free employment bureaus are pitted and which they are endeavoring to destroy. Information from Milwaukee states that in that city many of the private agencies are going out of business and that those that intend to remain in it, will use the employment agency merely as a side line to some other business. This effect is said to be due directly to the influence of the recently established state free employment bureau in Milwaukee, and the same is true in Superior.

GERMANY.

Before considering free employment bureaus maintained by various states of the Union, we will refer briefly to those existing in other countries.

In Germany there are three classes of employment bureaus—private pay agencies, the philanthropic bureaus and the various trade agencies. Private pay agencies are licensed and are under strict police regulations which in a large measure prevent the abuses practiced by many similar institutions in the United States. The philanthropic agencies are managed by religious societies or in connection with either public or private charitable institutions, police stations or lodging houses. The union agencies are managed by the different labor organizations.

The private agencies are patronized principally by domestics, sailors, clerks, actors and farm hands. According to an investigation made by Prussia in 1895, the number of private agencies alone in the kingdom was 5,216. During the year previous these agencies had received 535,020 applications for em-

ployment, 481,538 for help and had procured positions for 381,206 persons.

The prime object of the philanthropic agencies is to deal with, and suppress vagrancy. Of 1,957 agencies of this class in Germany, 250 are maintained by private charitable societies and the rest by the government. Those managed by private societies have offices to which applicants are referred and they also have relief stations where applicants can earn a ticket entitling them to food and lodging. There are institutions of this kind all over the empire and the possessor of one of these tickets, without fear of arrest may make his way from one to the other station in search of work. The government agencies are managed on practically the same plan.

The employment agencies managed by the trades unions were originally for the purpose of advancing the interests of the individual trade organization at the head of them. They are probably an outgrowth of the guilds which started with a view to regulating the supply and demand of labor. Of late years, however, these agencies have occupied a sort of middle ground where capital and labor come together to talk over and in many cases settle each other's grievances. In many instances both employers and employes belong to the same union. These agencies work under the great disadvantage of being open only in the evening but the results so far as reported are gratifying. In 1894 Prussia alone reported that 294,604 persons made application for employment and 140,747 for help, while 115,521 positions were procured for such applicants.

FRANCE.

The free public employment offices of France grew out of the method of dealing with the unemployed following upon the breaking up of the feudal system. The unemployed, amounting after a time to a veritable army, fell into the habit of congregating in certain quarters of the city for the purpose of placing their labor on the market. These gatherings were afterward legitimized under the name of Places de Greve, which gave M. de Molinari, the publisher of a labor paper, the

idea of a labor exchange. The first practical plan for such an institution was presented to the council of Paris in 1848 but the scheme was never carried out. Five years later another proposal was made but that too failed to carry. This later bill contained among other provisions, the following:

"Art 1.—There shall be erected in Paris under the direction of the state, a labor exchange.

"Art 2.—This exchange, divided into sections for different classes of trades, shall contain employment registers for workmen and all information adapted for the purpose of enlightening the public as to the different phases of labor."

This bill was also defeated, it being antagonized on the ground that it was communal in nature. The matter was referred to the council of Paris.

Nothing further was done until 1875, when shelter was provided for those that congregated at the docks to sell their labor. Agitation of the subject continued and finally in 1878, M. Manier secured the adoption of the following resolution by the Municipal Council of Paris: Considering that the labor exchange will at least have the effect of (a) suppressing the Places de Greve, (b) facilitating the placing of workers, (c) suppressing the registry offices, (d) centralizing the supply and demand with a view to rapidly bringing workers into relation with work, (e) establishing direct relations between the chambers of syndicates or corporate associations, as well as between all workers in general whether they belong to unions or not, the assembly, having heard the details of the proposal, invites the Municipal Council to vote the said proposal in its entirety in the present session."

This brought out a full discussion of the subject and various schemes were presented for consideration. The general attitude of the adherents of the movement was summed up by M. Mesureur in this way:

"In adhering to the standpoint of liberty of contract, you have the right, if not the duty, to furnish labor with the means of maintaining a struggle against capital with equal and legal weapons; without the labor exchange, the existence of syndicate chambers will always be precarious, the charges which they entail be prohibitive to the majority of workingmen."

"It is therefore necessary that they should have premises and offices to which every one may come without fear of having to sacrifice more time or money than he can afford; the free and permanent use of the meeting rooms will enable workers to discuss more fully and accurately the numerous questions which interest their trade or affect their wages; they will have for their guidance and instruction all means of information and correspondence, the resources furnished by statistics, a library with books on economy, industry and commerce, and the course of production in every industry, not only in France, but in the whole world."

Finally a labor exchange was established by the Paris municipal council, and in turn, by several other cities. The refusal of some of the trades unions to comply with the law, later brought about the dissolution of the general council of the exchange. The idea of free employment bureaus had become firmly rooted in the minds of the people, however, and the various agencies proved a success. The laws and decrees now governing these bureaus in France are similar to those in this country.

Private agencies in France are placed under strict regulations and the managers must give bonds for properly conducting them. Records must be kept for both applicants for work and for help. The applications must state the kind of work desired and the work that one is capable of doing. In many instances reading rooms are provided in connection with the agency, which contain literature designed to be of special assistance to the laborer.

The following table shows the work done in 1891 by the various agencies in France:

Employment agencies.	Number in 1891.	Applications for work.	Applications for help.	Position secured.
Guilds	32	6,288	6,198	6,188
Free municipal registries	24	24,805	13,292	10,876
Trade syndicates:				
1. Employers	54	22,594	2,551	18,826
2. Workers	322	122,666	71,639	94,662
3. Mixed	13	2,558	1,882	3,292
Licensed agencies	1,374	*2,495,079	*938,237	*821,450
Friendly societies	59	35,041	33,059	33,794
Convents and philanthropic agencies.	76	132,036	25,911	133,658

*These figures relate to only 994 private agencies which reported.

ENGLAND.

Though in England the idea of free employment agencies goes back to the merchants' and crafts' guilds of the thirteenth century, their actual establishment is of more recent date. The first one was opened at Egharn in 1885 and is still successfully maintained. It is managed by the "local superintendent of births, deaths and marriages, who gives his services gratuitously."

The plan of this bureau differs somewhat from that in vogue elsewhere. Cards on which are written the names of applicants are posted about the district in which the employment office is located. Both local and outside laborers are allowed to register but local applicants are given preference, and only those who are bona fide workmen out of employment are permitted to register. No charges are made for the services of the office, but successful applicants are invited to contribute a small portion of their earnings of the first few weeks. Such contributions, however, are entirely voluntary. The policy of the registry is to "scrupulously abstain from interference in any question of wages or conditions of service or labor troubles." Men on strike are not replaced by the agency, nor are employers whose employes are locked out, furnished help; neither does the employment office make any inquiries as to membership in trade unions or regarding wages previously obtained.

Those finding employment most readily through the bureau are gardeners, common laborers, men proficient in the building trades, and grooms. Besides procuring positions for laborers the employment office management in some cases makes loans to redeem tools from pawnbrokers or to remove families to other districts. About 75 per cent. of the money so loaned is repaid.

The official report on employment bureaus says that "the success of the registry seems very largely due to the fact that the superintendent knows personally most of those who are likely to apply, whether employers or workmen—a condition

of things possible in a country district, but not in a large town."

Another bureau opened at Ipswich in October, 1885, is somewhat more elaborate in scope. Its methods are thus described in a recent account of the bureau published by the honorary manager:

"When a man applies to us for work he is given a form, of which the following is a copy:

'No.

'IPSWICH LABOR BUREAU.

'Established for the purpose of finding work for men, and securing suitable men for employers. No fees are charged, but donations to defray working expenses are solicited.

'Office, Tower Street. Office hours: 9 to 5.

'Date,

'APPLICATION FOR WORK.

'Name .
'Address .
'Age .
'Married or single .
'What family .
'Trade (describe fully) .
'Name and address of last employer .
'How long in his employ .
'Average wages .
'Cause of leaving .

'CERTIFICATE OF CHARACTER TO BE SIGNED BY LAST EMPLOYER.

'I certify that is a competent workman; that he was in employ as stated above, and that his character and conduct were satisfactory.

'Signed

"If the above is filled up and signed by the last employer to our satisfaction, the man is registered in the following way:

No.	Date.	Name.	Ad- dress.	Occu- pation.	Age.	Mar- ried or single.	How many chil- dren.	Name of last em- ployer and refer- ence.	Wages.	How dis- posed of.
.....

"If there is an order on the books to suit him, and if the place is near enough to admit of it, we send him to it, but if it is at too great a distance, we send particulars of the man to the employer who has sent us the order, and if he thinks him suitable he goes. If we have no opening for him, we look up advertisements in the daily papers, and if anything likely is discovered, we send on to the advertiser the following form:

'LABOR BUREAU, IPSWICH.

'A medium for masters who want men, and men who are seeking employment.

'No fees. Offices: Tower street.

'Telephonic address: "Labor Bureau, Ipswich."

'Honorary Superintendent

WANTS EMPLOYMENT.

'Name Address

'Age Married or single

'Trade

'Last employer

"Having satisfied ourselves that the above is a competent workman, and of good character, we shall be glad if you can find him employment.

"We also advertise daily in the papers such men as we have on hand.

ORDERS FOR MEN.

"When masters apply to us for men, their orders are entered in a book, of which the following is a sample:

Date.	Name.	Address.	Occupation.	Man sent.	No. of register.	Date.	Result.
.....
.....

"If there is a man on the register likely to suit, particulars of him are sent. If not, we do our best to get one. To facilitate references we have an index to names and trades."

The methods of the Egham and Ipswich bureaux are typical of the English plan of free employment offices. The expenses are paid by private subscription. It is the policy of all the offices not to interfere in any way with strikes or lock-outs and to recommend only worthy laborers to worthy employers. The record of either laborer or employer is thoroughly investigated and the officials of the bureau use their own discretion in placing candidates. The number of positions filled by these offices is comparatively small, but it is urged that their existence acts as a powerful stimulus in raising unskilled labor to the rank of skilled labor.

OHIO.

Ohio was the first state in the union to pass a law authorizing the establishment of free public employment offices. This was in 1890. The Labor Congress of Cincinnati, composed of all the trades unions of the city, took the initiative. It started an agitation for such a law and framed a bill which its authorized representative in the legislature presented to that body. The bill as originally drawn up provided that the salaries of the superintendent and assistants and all other expenses of the bureau should be paid by the state, the employment offices being made branches of the state Bureau of Labor Statistics. The bill in this form passed the lower house but was amended in the senate. As finally passed, it read as follows:

"The commissioner shall have an office in the state house which shall be a bureau of statistics of labor and he shall collect, arrange and systematize all statistics relating to the various branches of labor in the state, and especially those relating to the commercial, industrial, social, educational and sanitary condition of the laboring classes. Said commissioner is hereby authorized and directed, immediately after the passage of this act, to organize and establish in all cities of the first class, and cities of the first and second grade of the second class in the state of Ohio, a *free public employment office*, and shall appoint one superintendent for each of said offices to discharge the duties hereinafter set forth. Said superintendents shall cause to be posted in front of their said offices on a sign board, or in suitable place on a building where such offices are located, the words "*Free Public Employment Offices*." It shall be the duty of such superintendents to receive all applications for labor of those desiring employment and those desiring to employ labor, and record their names in a book kept for that purpose, designating opposite the name of each applicant the character of employment, or labor desired and the address of such applicant. Each of said superintendents shall be provided with such clerical assistance as in the judgment of the commissioner may appear necessary for properly

conducting the duties of their several offices. No compensation or fee shall directly or indirectly, be charged to or received from any person or persons seeking employment or any person or persons desiring to employ labor through any of said offices. Said superintendents shall make a weekly report on Thursday of each week to said commissioner, of all persons desiring to employ labor and the class thereof, and all persons applying for employment through their respective offices, and the character of employment desired by each applicant; also, of all persons securing employment through their respective offices and the character thereof, and a semi-annual report of the expense of maintaining such offices. Said commissioner shall cause to be printed weekly a list of all applicants and the character of employment desired by them, and of those desiring to employ labor, and the class thereof, received by him from the respective offices aforesaid, and cause a true copy of such lists on Monday of each week to be mailed to the superintendent of each of said offices in the state, which said list by the superintendent shall be posted immediately on receipt thereof in a conspicuous place in his office, subject to the inspection of all persons desiring employment. Said superintendent shall perform such other duties in the collection of labor statistics as said commissioner shall determine. Any superintendent or clerk as herein provided, who directly or indirectly charges or receives any compensation from any person whomsoever in securing employment, or labor for any other person or persons as provided in this act, shall be deemed guilty of a misdemeanor, and shall be fined in any sum not exceeding fifty dollars, and imprisonment in the county jail or workhouse not exceeding thirty days. The superintendents of each said office shall receive a salary, *to be fixed by the council of such city*, payable monthly. The clerk or clerks required in any of such offices shall receive a salary of not more than fifty dollars per month, provided the compensation of such superintendents so appointed shall be paid out of the city treasury, in which such free public employment offices may be located."

This law in some respects is a curiosity as a sample of hastily

or loosely constructed legislation. It directed the commissioner to proceed at once to organize free public employment offices and to appoint the necessary officers to properly conduct them. One of the principal conditions necessary to the organization of any office is a provision for the salary for the one who fills it. This measure contemplated that the salaries be fixed and paid by the cities in which the employment offices were located. That provision placed the free employment offices and their organization practically beyond the control of the commissioner who alone was authorized by law to establish them. Another feature of the law, which also helped to defeat its real purpose, was the giving to cities of the power to make and unmake the free offices by paying or refusing to pay the salaries, according to their own desires or whims. Such a condition not only endangers the existence of the offices but tends to bring about collision between state and city authorities. Still another bad feature of the original law was the clause conferring upon the commissioner power to appoint superintendents and clerks, yet not the power of removal. This feature of the old law has been eliminated, however.

In spite of these obstacles the Ohio law has proved a success, as is shown by the following extract taken from the Commissioner's report on the first six month of the operation of the free public employment offices in the five cities where they were located:

"The total number of persons wanting situations was 20,136, and of this number 14,529 were males and 5,607 females.

"The total number of employes wanted by employers was 18,154, and of this 11,453 were males and 6,701 females.

"The total number of persons having secured situations through the offices was 8,982, and of this number 5,575 were males, and 3,407 females.

"The amount of 'help wanted' was 90.2 per cent. of 'situations wanted;' of positions secured, 49½ per cent. of 'help wanted;' of positions secured, 44.6 per cent. of 'situations wanted.'

"On account of the fact that offices had to be rented and furnished the work done by the free public employment offices

during the short time reported, is creditable alike to the officials in charge of the offices and to the state. The entire cost connected with the offices up to January, 1891, will not exceed \$5,000

"If the 8,982 persons who secured work through the free public employment offices had obtained employment through the private employment agencies, it is fair to assume that the cost of such services would have averaged \$3 per capita for males and \$1 for females, or a total of \$20,132, and by deducting from the latter sum the cost of maintaining the free public employment offices there is a balance of \$15,132 which has been saved to the willing yet poor and needy workingmen and women by the state law."

This seems an enormous amount of money saved to the laboring community during the first six months by the free employment offices, yet the commissioner has been more than fair in his deductions. In the first place the \$5,000 he has allowed for the running expenses of the free employment offices is as much of a saving to the laborers as any other part of the \$20,132 because they had no portion of it to pay. In the second place there were, according to the various reports, from 12 to 37 private employment offices previously located in the five cities where the free employment offices were placed. It is certainly fair to assume that there were 12 in existence and also from the means they adopted to secure applications for employment that the number of those applying for work at the private offices was in the same ratio to the number of applications for employment in the free public offices as the number of private offices was to the number of free public offices; or to state it mathematically assuming x to be the number of applications for employment in the private offices: $x : 20,136 :: 12 : 5$. Solving for the value of x there would appear to have been 48,326 applicants for employment at the private offices. Taking the rate which the commissioner assumes as the average enrollment fee charged by the private offices, namely, \$3 for males and \$1 for females, and assuming the proportion of males to females remain the same, we deduce another saving to the laboring class amounting to \$48,308.80, most of which was a saving to the very needy.

Again, while the five free employment offices were intended to serve the state as a whole, the further away from them one gets, the less their influence is felt, and the less do employers and employes make use of them. On the other hand private employment offices existed in all parts of the state in every town having 4,000 or 5,000 or more inhabitants. Their influence was felt in every part of the state equally. The officials of the free employment offices were especially energetic in securing positions for those applying to them, as the holding of their offices depends in a measure upon the number of positions thus secured. On the other hand the private offices bend their energies toward securing applications both for situations and for help, for the existence of such offices depends not so much upon the number of places filled as upon the number of applications received. Having no absolute information as to the number of applications the private offices did receive in Ohio, it will never be known how much the state might have saved to the laboring classes by properly advertising the free employment bureaus; the amount undoubtedly would reach into the hundreds of thousands of dollars.

Following is the report of the free public employment offices of Ohio from their organization on June 26, 1890 to July 1, 1901.

YEAR.	MALES.			FEMALES.			PERCENTAGES OF APPLICATIONS FILLED.	
	Situ- ations wanted	Help wanted	Posi- tions secur'd	Situ- ations wanted	Help wanted	Posi- tions secur'd	For situ- ations.	For help.
1890 from July 25...	14,600	11,453	5,575	5,607	6,701	3,413	44.62	49.51
1891	21,457	9,695	6,967	12,914	13,513	8,628	44.09	67.19
1892	15,522	8,227	5,905	11,424	13,945	7,840	51.01	62.
1893	14,169	5,826	4,566	12,685	11,403	8,651	49.16	76.62
1894	14,521	2,426	2,140	14,616	9,440	7,626	33.52	82.50
1895	14,165	3,061	2,677	13,793	12,172	9,048	41.94	77.02
1896	12,668	3,048	2,761	15,029	12,632	10,158	50.26	82.39
1897	13,159	4,289	3,912	13,298	14,824	13,135	64.43	89.19
1898	14,118	4,494	4,029	12,891	16,147	13,666	65.52	76.44
1899	15,259	6,216	5,058	10,886	17,861	9,931	56.89	62.72
1900	11,079	6,608	4,714	9,776	15,829	8,630	63.98	59.47
1901 to July 1st	5,732	4,023	2,894	4,728	7,843	4,029	66.19	58.35
Total	166,387	69,560	51,098	137,647	152,130	104,739	51.26	70.36

MONTANA AND OTHER STATES.

Montana followed Ohio by establishing a free employment office through a legislative enactment amending the act providing for a state labor bureau. This first employment office was managed by this bureau. It proved a failure, however, its scope being too limited. The office was expected to bring laborers and employers together by merely recording the names of the applicants and using the mails to aid in placing the men in positions.

In March, 1897, this act was repealed and a new one substituted, this one outlining an altogether different method for the management of free employment offices. It provided that any municipality might establish free employment offices, but the state gave no financial aid. For many reasons this plan also proved a failure. First of all, it was a political measure. Neither were conditions ripe for such institutions. The country was too sparsely settled and nearly all the railroads and mining companies had their own employment offices. The cities were not anxious to undertake the expense of maintaining such offices and the fact that they were to be supervised by the state labor bureau worked against them. In fact no cities have undertaken to open free employment offices and the attempts at such action in Montana have thus far resulted in little benefit to the laboring and employing classes.

NEBRASKA.

Nebraska has met with better results from a law nearly identical with that of Montana. In April, 1897, such a law was passed creating a free employment department to be run in connection with the state Bureau of Labor and Industrial Statistics. Although it has been charged that this measure was a political one, the commissioner has expressed himself as being well satisfied with the results obtained through it. This is true of Nebraska in spite of the fact that many of the conditions helping to cause failure in Montana confronted the Nebraska law as well.

Only \$650 was appropriated for the annual expenses of the Nebraska offices and this allowance was less than was needed for extra clerk hire in the state labor bureau. No other extra help was provided for the bureau. This has naturally placed the commissioner at a great disadvantage in trying to make the influence of the employment offices extend over the entire state. There were no funds with which to advertise the new department and scarcely enough for postage. Neither was the office located in the city where it could accomplish most; it was located at the capital (Lincoln) and even outside the business district of that city. Yet the commissioner thinks that the results obtained under such adverse conditions have been such as to demonstrate that under a proper law "the free employment department may be made a blessing to the laboring people and a permanent benefit to the state."

Still the work of the Nebraska office does not show up as favorably as the optimistic view of the commissioner might imply. During the first 14 months there were received 1,040 applications for help and only 218 positions were filled. This latter number, however, probably should be considerably larger had all those that were helped to positions made reports to the bureau after obtaining them.

MISSOURI.

In 1892, Labor Commissioner Hall of Missouri in a report to the state legislature commended highly the work of the Ohio employment bureau and urged the legislature to pass a measure providing for such bureaus to be organized on a similar basis. Although a bill was prepared after the Ohio model it failed to pass. In 1897, however, Labor Commissioner Rozelle decided that conditions demanded free employment offices and decided to establish an agency without awaiting legislative permission. Accordingly he opened such an office in connection with the office of the state factory inspector at St. Louis. The new department proved so successful that the legislature in 1899 provided for the establishing of free employment offices in all cities of the state, having a population of 100,000 or more, the state to pay salaries and other expenses in connection with the operation of the offices.

Three cities were thus entitled to offices and they were established in Kansas City, St. Louis and St. Joseph. These offices reported for the year ending Oct. 31, 1891 as follows: Applications for work, 13,035; for help, 17,080; number of positions filled, 8,473; applications for help unfilled, 8,587.

Concerning the effect of the free employment offices upon the business of the private agencies, Chief Clerk R. C. Howe of the state labor bureau of Missouri writes under date of Jan. 4, 1902: "The establishment of these free employment bureaus has had the effect of driving out of business all the fraudulent agencies and to a great extent has regulated all others by compelling them to comply with the law."

CALIFORNIA.

The California Bureau of Labor took the initiative in the free employment matter in that state by establishing an office in San Francisco in July, 1895, without special legislative sanction. The expenses of the office were met during the first nine months by funds from the regular appropriation for the bureau. At the end of that time private subscriptions for the free employment office were solicited and the business men and trades unions of the city subscribed \$970. The labor commissioner thus maintained the bureau until August, 1896, when it closed, the state failing to make any provision for keeping it alive or for re-opening it. In his seventh biennial report, the commissioner discusses the bureau as follows:

"The main feature leading to the ultimate success of the undertaking was the selection of only reliable help for the employer, and for this purpose it was necessary to establish a system by which the applicant for work could be followed from the time he was found a position to the time he again sought assistance at the bureau. Each employer was required to fill out a blank specifying the number and sex of employes wanted, the kind of work, wages, and preferences as to age, nationality, and the like. Applicants for employment were required to fill out blanks, giving name, address, occupation, years of experience, wages expected, residence in State, nationality, lit-

cracy, conjugal condition, number in family, reasons for unemployment, and references. The data contained in those applications was entered in separate books kept for the purpose. In addition, each applicant for employment who was sent to fill a position was given an employment card, stating his name and prospective occupation and wages. He was also given two postal cards to be delivered to his employer, one of which was to be used by the latter in notifying the department of the engagement of the applicant, and the other of his eventual discharge and the reason therefor.

"During the first year of its existence, from July 15, 1895, to Aug. 1, 1896, there were received 18,920 applications for employment, of which 14,251 were from men, and 4,669 from women. Of this number, 5,845 secured positions, 3,314 being men and 2,531 women. Out of the 5,845 persons furnished with positions, less than 30 had been reported on adversely. In spite of this promising beginning and in the face of potent arguments for the continuance of the work thus begun, the department was discontinued after a year."

IOWA.

Soon after the opening of free employment offices in Ohio, the Iowa commissioner of labor attempted to persuade the legislature of his state to provide for free employment agencies. His repeated efforts resulted in failure, however, and he then tried another plan—that of establishing such offices in connection with his bureau and in co-operation with the county auditors of the state. This plan met with so little encouragement from employers that it was soon abandoned, leaving Iowa without free employment agencies.

WASHINGTON.

Seattle, Washington is the only city in the United States having a municipal bureau of labor statistics. A free employment office was originally connected therewith, but was later placed under the civil service department of the city. The success of the employment office has forced the civil serv-

ice commission to enlarge its quarters and from time to time to increase its office force. This is due largely to the support and co-operation of the employers of labor throughout the state.

The following table shows what the work of the bureau has been during six years in regard to the number of positions procured and cost of such work:

Year.	1894.	1895.	1896.	1897.	1898.	1899.
Total	2,623	3,729	3,268	5,952	13,871	18,153
Hop pickers	1,144	2,050	*135	2,890	2,235	2,682
Railroad laborers	†	†1,311	†571	2,784	7,077	2,102
Grand total	3,967	5,779	3,403	11,626	24,183	22,837
Total expenses	\$909 65	\$1,120 00	\$720 50	\$724 80	\$1,377 13	\$1,136 66
Cost of each position furnished	0.2293	0.1938	0.2138	0.0624	0.0569	0.05

*Crop failure.

†Not given.

‡Office did not act for railroads before 1897.

Although this office is a municipal one it has perhaps a wider field of operations than any other employment bureau in existence. The territory over which it does business includes Idaho, Montana, Oregon, California, Washington, British Columbia and Alaska. The records for 1898 show that 63 per cent. of the positions filled were of common, unskilled labor, 30 per cent. were positions requiring some skill and the remainder for skilled labor. Nearly nine-tenths of the business is done outside the city. Private agencies which are now required to pay a license of \$100 have been largely displaced by the municipal agency.

COLORADO.

Colorado has no free public employment offices, but a law was recently passed in that state regulating the private agencies and securing seekers of employment against the frauds often practiced by such institutions. Any person desiring to operate an intelligence office must pay a license fee of \$100 and give bonds in the penal sum of \$2,000 for properly conducting the same. The applicant for employment may sue for and collect damages which he may have incurred through any "misrepresentation or fraud or deceit" on the part of those conducting the

business of the licensed agency. As remuneration for procuring positions the law provides a maximum fee of five per cent. on one month's wages in case of males, and three per cent. for females. A registration fee may also be charged.

MARYLAND.

Maryland organized a free employment bureau in 1896. Most of its business is conducted through the mails, however, and no report concerning its operations was obtainable.

The laws of Louisiana, Maine, Massachusetts, Minnesota, New Jersey, Pennsylvania and Rhode Island governing employment agencies are similar to those of Colorado.

OTHER STATES.

The legislatures of Connecticut and West Virginia in 1901 passed laws establishing free employment offices but no definite information regarding the work being done was obtainable. However, in each case assurance was given that the offices are doing a very satisfactory business.

NEW YORK.

New York state in 1896 passed a law providing for the organization by the state labor commissioner, of free public employment bureaus. The commissioner was instructed to locate such bureaus in all cities of the first class in the state, to appoint superintendents and clerks such as are necessary for the various offices and to fix the salaries of these appointees. The state makes appropriations to cover the necessary expense.

The reports of the New York labor commissioner charge that that state has furnished a field of operations for employment agents who have perpetrated frauds unequaled in any other state; yet nothing has been done to change the state law so as to affect such agents in any way. Private agencies are still permitted to enjoy all the liberties which were theirs before the law establishing free employment offices was enacted.

Weekly reports from each of the free employment office superintendents are received by the commissioner of labor.

These reports contain the names and addresses of all persons applying for work or for help, the character of the work or help desired and the names of those that have such applications filled through the bureau. The superintendents are required not only to supply such information, but also any additional statistics that the commissioner may call for.

From July 1896 to Jan 1, 1897, the first few months of the existence of free employment offices, the percentage of applications for work filled was only five and one-half; in 1899, 20 per cent. was filled; in 1898, 39.6 per cent., and in 1899, 45.4 per cent. In a comparison with results in Ohio, these figures appear at a disadvantage. This may be attributed largely to the fact that New York's law places no restrictions upon private employment agencies, and to the fact that the highly developed spoils system in New York prevents the employment offices from supplying men for public works. There is also a greater or less percentage of applicants who come from foreign countries, register at the free employment offices but very shortly pass on to other points in search of work. New York bureaus are, of course, subject to such cases to a greater extent than any of the other states having similar employment offices.

ILLINOIS.

Illinois was the fifth state to pass a law providing for free employment bureaus and the law passed was the most complete one of its kind that had been adopted by any state. It was not enacted for political reasons but because of the need for such a law, especially in Chicago, where it was expected that the bureau would do a great deal toward bringing employers and those out of work together. Another function for the bureau is that of classifying applicants as to their abilities in order that the right men may be chosen for the right place and not be sent promiscuously to fill the various positions.

The Illinois law is framed with the purpose in view of bringing employers and laborers together with the least possible delay and a minimum of expense. The state appropriates a sufficient amount to meet all expenses of the offices including

those of a superintendent, an assistant and a clerk, one of whom must be a woman. Besides this each of the four offices that have been established are allowed \$400 per year for advertising purposes.

Among the prescribed duties of the superintendents the law requires that they "record in a book kept for that purpose the names of all persons applying for employment or help, designating opposite the name and address of each applicant the character of employment or help desired. Separate registers for applicants for employment shall be kept, showing the age, sex, nativity, trade or occupation of each applicant, the cause and duration of [non-] employment, whether married or single, the number of dependent children, together with such other facts as may be required by the bureau of labor statistics to be used by said bureau; but in no case shall the above information be open to the public; nor will the refusal to give such information on the part of the applicant debar him from the services of such employment office."

It is made the further duty of the superintendent of each employment office to "put himself in communication with the principal manufacturers, merchants and other employers of labor, and to use all diligence in securing the co-operation of the said employers of labor, with the purposes and objects of said employment offices."

The superintendent must make to the commissioner a weekly report of the work done in his office and the commissioner in turn forwards a copy of each report to each superintendent. No fee, either directly or indirectly, shall be charged the applicant for help or for employment. Neither shall the superintendent furnish help to any employer whose employes are on a strike or are locked out. It is made the duty of the factory inspectors to assist, in every legitimate way, in securing positions for those applying for work and in getting applications for help. In Ohio the converse of this is true. There the superintendents of employment offices are compelled to perform the duties of a factory inspector. Thus in Ohio the city in which a free employment office is located pays for services rendered for the state.

The Illinois law also makes some requirements of private employment agencies. A license fee of \$200 is imposed and bonds in the sum of \$1,000 are demanded, to insure proper conduct on the part of the agency.

In classifying the industries in a somewhat general way, it is seen that 97 per cent. of the applications for employment and 91 per cent. of those for help in the agricultural class have been filled by the Illinois offices; in the commercial class, including deliverymen, canvassers, salesmen, etc., 48 per cent. of those applying secured positions and 62 asking for such help procured it; 76 per cent. of those wanting positions as domestics obtained them, while 96 per cent. wanting such services were supplied. In the manual labor class, 97 per cent. of the applicants procured work, and 77 per cent. of employers who applied were furnished with help. Under the head of transportation, including such as baggagemen, hostlers, conductors, etc., 91 per cent. of those seeking help obtained it. In the miscellaneous class the same result is shown. These figures relate to the males alone. Referring to the columns for females, under the head of domestic service, 97 per cent. of those asking for work and 81 per cent. of those asking for help were accommodated.

The following table gives the totals as taken from the reports for two years:

YEAR.	MALES.			FEMALES.			PERCENTAGES OF APPLICATIONS FILLED.	
	Situ- ations wanted	Help wanted	Situ- ations secur'd	Situ- ations wanted	Help wanted	Situ- ations secur'd	For situ- ations.	For help.
For year ending Oct. 1st, 1900.....	21,142	16,749	15,322	16,143	13,793	15,896	83.72	87.83
For year ending Oct. 1st, 1901.....	26,188	21,422	17,481	14,232	17,079	13,148	75.78	79.55

WISCONSIN.

Since July 1, 1901, Wisconsin has supported free public employment bureaus. The 1901 session of the state legislature enacted a law providing for the establishment of such offices under the supervision of the State Labor Commissioner and the

legislators in framing the measure tried to profit by the experience of the various other states that had already had experience with free labor employment offices. Following is the text of the Wisconsin law. The law creating such offices in Wisconsin is given in full and reads as follows:

CHAPTER 420, LAWS OF 1901.

To create free employment offices in certain cities, regulating the same, providing for the appointment of a superintendent, fixing his salary, licensing private employment agencies, fixing penalties for a violation of its provision and making appropriation therefor.

Where located.—Section 1. A free employment office is hereby created in each city of a population of thirty thousand or over according to the last state or national census; for the purpose of receiving applications of persons seeking employment and applications of persons seeking to employ labor. Such office shall be designated and known as Wisconsin free employment office.

Appointment; salary; offices.—Section 2. Within thirty days after this act shall have been in force, the commissioner of the bureau of labor and industrial statistics shall recommend, and the governor shall appoint a superintendent for each of the offices created by section one of this act, and who shall devote their entire time to the duties of their respective offices. The tenure of such appointment shall be two years, unless sooner removed for cause. The salary of each superintendent shall be twelve hundred dollars per annum, which sum, together with the proper amounts for defraying the necessary costs of equipping and maintaining the respective offices, rent for such offices not to exceed five hundred dollars per annum, shall be paid out of any funds in the state treasury not otherwise appropriated.

Office; signs; record books; registers.—Section 3. The superintendent of each such free employment office shall, within sixty days after appointment, open an office in such locality as shall have been agreed upon between such superintendent and the commissioner of the bureau of labor and industrial statistics as being most appropriate for the purpose intended; provided that said employment office shall be occupied in conjunction with the bureau of labor and industrial statistics when such bureau has an office in any of said cities, and in case said bureau has no office in any of said cities, then in that case the city council wherein said free employment office is established shall furnish and equip an office for said employment bureau, either in conjunction with a department of said city or separately without cost to the state, such office to be provided with a sufficient number of rooms or apartments to enable him to provide, and he shall so provide, a separate room or apartment for the use of women registering for situations or help. Upon the outside of each such office, in position and manner to secure the fullest public attention, shall be placed a sign which shall read in the English language, "Wisconsin Free Employment Office," and the same shall appear either upon the outside windows or upon signs in such other languages as the location of such office shall render advisable. The superintendent of each such free employment office shall receive and record in books kept for that purpose names of all persons applying for employment or help, designating opposite the name and address of each applicant the character of employment or help desired. Separate registers for applicants for employment shall be kept, showing the age, sex, nativity, trade

or occupation of each applicant, the cause and duration of non-employment, whether married or single, the number of dependent children, together with such other facts as may be required by the bureau of labor and industrial statistics to be used by said bureau: Provided, that no such special registers shall be open to public inspection at any time, and that such statistical and sociological data as the bureau of labor may require shall be held in confidence by said bureau, and so published as not to reveal the identity of any applicant. And, provided, further, that any applicant who shall decline to answer the questions contained in special register shall not thereby forfeit any right to any employment the office might secure.

Report to the commissioner; lists posted; duty of factory inspector.—Section 4. Each superintendent shall report on Thursday of each week to the state bureau of labor and industrial statistics the number of applications for positions and for help received during the preceding week, also those unfilled applications remaining on the books at the beginning of the week. Such lists shall not contain the names or addresses of any applicant, but shall show the number of situations desired and the number of persons wanted at each specified trade or occupation. It shall also show the number and character of the positions secured during the preceding week. Upon receipt of these lists, and not later than Saturday of each week, the commissioner of the said bureau of labor and industrial statistics shall cause to be printed a sheet showing separately and in combination the lists received from all such free employment offices; and he shall cause a sufficient number of such sheets to be printed to enable him to mail, and he shall so mail, on Saturday of each week, two of said sheets to each superintendent of a free employment office, one to be filed by said superintendent and one to be conspicuously posted in each such office. A copy of such sheet shall also be mailed on each Saturday by the commissioner of the state bureau of labor and industrial statistics to the state inspection of factories. It is hereby made the duty of said factory inspector to do all he reasonably can to assist in securing situations for such applicants for work, to secure for the free employment offices the co-operation of the employers of labor in factories, to immediately notify the superintendent of free employment offices of any and all vacancies or opportunities of employment that shall come to his notice.

Superintendent to communicate.—Section 5. It shall be the duty of each such superintendent of a free employment office to immediately put himself in communication with the principal manufacturers, merchants and other employers of labor, and to use all diligence in securing the co-operation of the said employers of labor, with the purposes and objects of such employment offices.

Report.—Section 6. It shall be the duty of each such superintendent to make a report to the state bureau of labor and industrial statistics annually, not later than December 1st of each year, concerning the work of his office for the year ending October first of same year, together with a statement of the expenses of the same, and such reports shall be published by the said bureau of labor and industrial statistics annually. Each such superintendent shall also perform such other duties in the collection of statistics of labor, as the commissioner of the bureau of labor and industrial statistics may require.

Fee or compensation; penalty.—Section 7. No fee or compensation shall be charged or received, directly or indirectly, from any person or corporation applying for employment or help through said free employment offices; and any superintendent or clerk who shall accept, directly or indirectly, any fee or compensation from any applicant, or from his or her representative, shall be deemed guilty of a misdemeanor, and, upon conviction, shall be fined

not less than twenty-five dollars nor more than fifty dollars and imprisoned in the county jail not more than thirty days.

Strike or lock-out.—Section 8. In no case shall the superintendent of any free employment office created by this act, furnish or cause to be furnished, workmen, or other employes to any applicant for help whose employes are at that time on strike or lock-out; nor shall any list of names and addresses of applicants for employment be shown to any employer whose employes are on a strike or locked out; nor shall such list be exposed where it can be copied or used by an employer whose employes are on a strike or lock-out.

Applicant; work.—Section 9. The term "applicant for employment" as used in this act shall be construed to mean any person seeking work of any lawful character, and "applicant for help" shall mean any person or persons seeking help in any legitimate enterprise. Nothing in this act shall be construed to limit the meaning of the term "work" to manual occupation, but it shall include professional service, and any and all other legitimate services.

Private employment agency; license; sign.—Section 10. No person, firm or corporation in the cities designated in section one, of this act, shall open, operate or maintain a private employment agency for hire or where a fee is charged to either applicants for employment or for help, without first having obtained a license from the secretary of state, for which license he shall pay one hundred dollars per annum; and no such private agent shall print, publish, or cause to be printed or published, or paint on any sign, window or newspaper publication, a name similar to that of the Wisconsin Free Employment Offices. And any person, firm or corporation violating the provisions of this act, or any part thereof, shall be deemed guilty of a misdemeanor, and upon conviction such person, firm or, if a corporation, all the officers thereof, shall be fined not less than twenty-five dollars nor more than fifty dollars.

Superintendent; removal.—Section 11. Whenever, in the opinion of the commissioner of the bureau of labor and industrial statistics, the superintendent of any free employment office is not duly diligent in the performance of his duties, he may summon such superintendent to appear before him to show cause why he should not be recommended to the governor for removal, and unless such cause is clearly shown the said commissioner may so recommend. In considering such a case a low percentage of positions secured to applicants for situation and help registered, lack of intelligent interest in the work, or a general inaptitude or inefficiency may be deemed by said commissioner sufficient to recommend a removal. And if, in the opinion of the governor, such lack of efficiency cannot be remedied by reproof and discipline, he shall remove such person from office as recommended by said commissioner; provided, that the governor may at any time remove any superintendent or clerk for cause.

Printing, blanks, postage, etc.—Section 12. All such printing, blanks, blank books, stationery and postage as may be necessary for the proper conduct of the business of the offices herein created shall be furnished by the secretary of state upon requisition for the same made by the commissioner of the bureau of labor and industrial statistics.

Section 13. This act shall take effect and be in force, from and after its passage and publication.

CHAPTER 213, LAWS OF 1899.

Regulating employment and intelligence offices and bureaus.

License; penalty.—Section 1. No person shall engage in the business of keeping an employment or intelligence bureau or office or agency for the purpose of hiring men to work for others, and receive a compensation for such hiring without first having obtained a license so to do as hereinafter provided; any person or persons who shall establish or keep any office or place within said state, for the purpose of obtaining place or employment for laborers of any kind whatever, or for procuring or giving information concerning such places or employment to such laborers, or for procuring or giving information concerning such laborers to employers, shall be deemed a keeper of an employment or intelligence bureau, office or agency; and any person who shall engage in such business without such license, shall be guilty of a misdemeanor and shall upon conviction thereof be punished by a fine not exceeding one hundred dollars or imprisonment in the county jail not exceeding ninety days, or both.

Application.—Section 2. Any person who desires to engage in any such business may apply to the common council if such business be carried on in a city, or to the village council if in a village, or to the county board of the county in which such business is to be carried on if in the country, for such license, and pay into the treasury of such city, village or county the sum of ten dollars, and upon executing and delivering to such common council, village council or county board a bond in the penal sum of one thousand dollars, with sufficient sureties, or in lieu thereof a surety bond of one thousand dollars, to be approved by such common council, village council or county board, he shall be entitled to such license. Each license shall designate the house in which the person licensed shall keep his office, giving street and number of the same, and the number of such license, and shall continue to be in force until the first day of May next ensuing the date thereof and no longer; provided, always, that the foregoing license fee shall be the same for any length of time whether issued for a year on the first day of May, or any fractional part thereof; and no license issued hereunder shall be transferred to any other person or persons whatever, or inure to the benefit of any other person other than the licensee.

Bonds.—Section 3. The bonds shall run to the state of Wisconsin, and shall be conditioned for the payment of any damage that any person secured or engaged to labor for others by the obligator, may sustain by reason of any unauthorized act, fraud or misrepresentation on the part of such agent for such hiring. The bond shall be filed with the city clerk if approved by the common council, with the village recorder if approved by the village council, and with the county clerk if approved by the county board of any county. Any person licensed and having given bond as herein provided may, while continuing to reside or maintain his office at the place mentioned in such license, prosecute his said business in any part of the state.

Persons engaged to work.—Section 4. Every person hired or engaged to work for others by one so licensed as aforesaid, shall be furnished a written copy in duplicate of the terms of such hire or engagement, rate of wages or compensation, kind of service to be performed, length of time of such service, with full name and address of the person or persons, firm or corporation authorizing the hire of such person, one of the aforesaid copies to be delivered to the person or persons, firm or corporation for whom the contracted labor is to be performed, and the other to be retained by the person hired as aforesaid.

And any person hired or engaged to work for others by one so licensed as aforesaid, who shall fail to get employment according to the terms of such contract of hire or employment, by reason of any unauthorized act, fraud or misrepresentation on the part of such agent, may bring an action upon said bond, and may recover in such action against the principal and sureties the full amount of his damages sustained by reason of such unauthorized act, fraud or misrepresentation, together with his costs, disbursements, in such action; provided, however, that nothing contained herein shall apply to agencies conducted by women for the purpose of securing employment for females only.

This is the law under which free employment offices in Wisconsin were organized. As the provisions in the same are numerous, and the law as a whole quite lengthy, it was thought advisable for the sake of convenience to summarize the more important provisions under their respective heads and present the same in a briefer form:

SUMMARIES OF CHAPTER 420, LAWS OF 1901.

1. Free employment offices to be established in—

Places having thirty thousand or over, according to last state or national census.

2. Purpose—

To receive applications of those seeking employment and those seeking for help.

Superintendent—

One for each office created by section 1 to devote entire time to duties.

Appointment—

Governor appoints upon recommendation of commissioner.

Term—

Tenure of office—Two years.

Salary—

\$1,200 per annum.

Duties—

Shall receive and record applications, names, addresses, character of work desired, etc.

Shall keep separate registers, showing age, sex, nativity, cause and duration of non-employment, trade or occupation, married or single, dependent children, if any, and such other facts as the Bureau may require.

Shall immediately communicate with principal manufacturers and cooperate with employers.

Shall make annual report of work done with statement of expenses to commissioner in December, for year ending October 1st.

Shall report to the commissioner on Thursday of each week the number of applicants received; the unfilled applications at the beginning of the week.

Such lists shall not contain the names or addresses of applicants; but the situations desired and number of persons wanted at each occupation.

Shall report number and character of positions secured during the preceding week.

Shall perform such other duties in collection of statistics as commissioner may require.

Shall not receive nor charge a fee or compensation from any applicant—Penalty.

Removal of—

If not duly diligent in performance of his duties he may be summoned before commissioner to show cause why he should not be recommended for removal.

Removal, causes of—

Low percentage of positions secured to applicants.

Lack of intelligent interest in work or general inaptitude or inefficiency.

Proviso—

Special register not to be open to public.

The commissioner shall make no statistical publication which would reveal the identity of applicants.

If applicant declines to answer any special register question he shall not forfeit right to employment.

Applicants not to receive help or benefit of the office who are on a strike or lock-out.

No lists of vacancies shall be exposed, where they can be copied by such persons.

Commissioner—

Duties—

Upon receipt of lists, not later than Saturday of each week, shall print a sheet showing separately and in combination the lists received from all employment offices.

Shall mail on each Saturday two of such sheets to each superintendent, one to be filed by him, the other to be posted.

Shall mail to factory inspectors a copy of such sheet.

Shall publish annual report of superintendent.

Factory Inspectors—

Duty—

To assist in securing situations for applicants.

Secure co-operation of employers of labor in factories.

Notify superintendent of vacancies or opportunities of employment which may come to their notice.

Offices—

Shall be opened within 60 days after appointment of superintendent in such locality as superintendent and commissioner may deem best.

Cost of equipping and maintaining offices to be paid out of treasury.

Rent not to exceed five hundred dollars.

Offices to be occupied in conjunction with offices of Bureau, if such office is in such city.

If not, city to furnish and equip office without expense to the state. Separate rooms are to be provided for women.

Signs—**Wordings of—**

"Wisconsin Free Employment Office."

Private employment agency—

Not to open office where free employment office is established except a license is secured from secretary of state.

Shall not print, publish or paint on any sign, window or newspaper publication a name similar to Wisconsin Free Employment Agency—Penalty.

Applicant—**Construction of—**

"Applicant for employment" is construed to mean any person seeking work of any lawful character.

"Applicant for help"—any person seeking help in any legitimate enterprise.

"Work" applies to any lawful occupation, to include professional service.

Stationery—

Printing, blanks, blank books, stationery and postage, such as may be necessary for offices, shall be furnished by secretary of state upon requisition for the same made by commissioner.

The provisions of section 1 of the foregoing act confine the state free employment bureaus at present to two cities—Milwaukee and Superior—and there have been, therefore, but two such offices opened in the state.

There are several sections of the law that contain especially interesting provisions. Sections 8 and 10 are much the same as the corresponding sections of the Illinois law. One prohibits the superintendent of a bureau from exhibiting any list of names and addresses of applicants for employment to any employer whose workmen are on a strike or who are locked out. This section was inserted out of consideration for the rights of organized labor and for the purpose of preventing the state from being made the tool of any parties in their conflicts with wage earners.

Section 10 is designed as a safeguard against private employment agencies and was inserted with the expectation that such agencies would soon disappear from cities provided with state employment offices. In such cities no private agency may be opened without first obtaining a license, the fee for which is \$100 per year. All such agencies in the state must also file bonds in the sum of \$1,000, which guarantees patrons against loss on account of fraud and misrepresentation by agents.

Co-operation between state employment agencies and state factory inspectors is made mandatory by section 4. The inspectors

are expected to assist very considerably in bringing employers and state employment agencies together.

During the first year of the operation of the Milwaukee and the Superior state employment agencies there were filed with these offices 9,002 applications for employment and 9,051 for help. Through the offices 7,380 applicants were given employment. The aggregate numbers and percentages of the applications received and filled during the year ending June 28, 1902, by the two offices mentioned, are given in the following tables:

SHOWING, BY OCCUPATIONS, THE NUMBER OF MALE APPLICANTS FOR EMPLOYMENT, THE APPLICATIONS FOR HELP AND POSITIONS FILLED IN THE MILWAUKEE OFFICE DURING THE YEAR ENDING JUNE 28, 1902.

Male—Milwaukee.

CLASSIFICATION OF POSITIONS.	NUMBER OF APPLICATIONS FILED.		Number of positions filled.
	For employment.	For help.	
Agents	2		
Apprentices	53	43	32
Baggageman	1	1	1
Baker	5		
Barber	1		
Barnman	23	25	23
Bartenders	7	1	1
Bell boys	12	12	11
Bench moulder	2	1	1
Blacksmiths	18	12	8
Blacksmiths' helpers	19	13	8
Bookbinders	2		
Bookkeepers	25	1	1
Bottle washers	1	1	1
Brass finishers	5	5	9
Brass polishers	4	4	
Brewery hands	4	2	2
Buffers	1	1	1
Buggy washer	1	1	1
Butchers	5	2	2
Buttermakers	1		
Cabin boy	1	1	1
Cabinetmaker	13	48	8
Canvassers	3	11	3
Carpenters	75	84	50
Chemists	1		
Chore boys	30	32	26
Chore men	62	40	37
Cigarmakers	1		
Clerks	175	15	13
Clerks, grocer	5	1	1
Clerks, hotel	3	3	2
Clerks, office	15		
Clerks, shipping	2		
Clerks, shoe	1		

MILWAUKEE—Continued.

CLASSIFICATION OF POSITIONS.	NUMBER OF APPLICATIONS FILED.		Number of positions filled.
	For employment.	For help.	
Clothing cutters	2		
Coachman	25	11	7
Coal passers	1	1	1
Collectors	25		
Confectioners	1	1	1
Cooks	28	19	14
Coopers	2	10	1
Core makers	12	17	5
Dairy hands	6	5	4
Decorator	1		
Delivery	3		
Delivery boys	30	34	24
Delivery men	51	10	9
Dishwashers	36	25	25
Distributors	33	37	32
Draughtsmen	5		
Electrical engineer	1		
Electricians	6	2	1
Electric linemen	2	6	2
Elevator boys	7	2	2
Elevator men	8		
Elevator operators	7		
Erecting engineer	1	1	1
Engineers	41	4	3
Engravers	1	1	
Errand boy	17	12	11
Factory hands	507	464	370
Farm hands	208	206	175
Finishers	4	2	2
Firemen	58	25	20
Gardeners	12	13	9
Handy men	19	15	14
Harnessmaker	1		
Horseman	3		
Horseshoers	1		
Iron workers	5	1	1
Janitors	25	6	5
Kitchen men	1		
Laborers	1,455	1,609	1,325
Lathe hands	1	1	1
Lathers	7	7	7
Laundry hands	1	1	1
Laundry man	3	1	1
Machine App.	2		
Machinists	48	44	25
Machinists' helpers	35	21	16
Masons	10	23	8
Masons' helpers	1	1	1
Meat cutters	4	1	1
Messenger boys	3	4	3
Millwright	1	2	1
Moulders	43	48	24
Moulders, brass	1		
Moulders' helpers	1		
Newspaper work	1		
Riggers	1	1	1
Roofers	1		
Salesman	29	3	3
Sausage maker	2	1	1
Scalers	1		
Office boy	32	25	19
Packers	6		

MILWAUKEE—Continued.

CLASSIFICATION OF POSITIONS.	NUMBER OF APPLICATIONS FILED.		Number of positions filled.
	For employment.	For help.	
Painters	33	19	14
Panwashers	4	5	4
Pantryman	1	1	1
Paper cutter	1		
Paper hanger	2	3	
Pattern maker		4	
Pipe fitter	1		
Plater	2		
Plumber	2		
Plumbers' helper	4		
Polisher	1	1	1
Porter	34	29	27
Pourers		10	
Printers	4		
Proofreader	1		
Repairers clothing		1	
Repairmen	1	2	1
Reporters	2		
Shinglers		2	
Shippers	1		
Shoe cutters	1		
Shoemakers	5	3	2
Shopman	1	1	1
Solicitors	30	25	18
Sorters (lumber)	1	1	1
Steamfitter	1		
Stenographers	16	3	3
Stone cutters	1	1	1
Store-room Ass't.	1	2	1
Structural iron workers		1	
Surveyor	1		
Switchman	1		
Tailors	6	4	3
Tailors' apprentices	2	2	2
Tanners	4	4	2
Tannery hands	2	6	2
Teamsters	182	162	142
Telegraph operators	1		
Timekeepers	2		
Tinners	1		
Tool dresser	1		
Toolmaker	2	2	1
Trimmers (trees)	2	4	2
Typesetters	1		
Typewriter operators	1		
Undertaker's assistant	1		
Wagon makers	2	6	1
Walters	16	9	6
Warehouseman	3	1	1
Watchman	22	6	5
Weavers	2	4	1
Wholesale house	1		
Window washer	2	2	2
Wire weaver		1	
Wire workers	1	1	1
Wood carver	3	3	1
Wood chopper	5	5	4
Wood turner	2	1	1
Wood workers	3	5	2
Total	3,936	3,424	2,674

SHOWING BY OCCUPATIONS THE NUMBER OF FEMALE APPLICANTS FOR EMPLOYMENT, THE APPLICATIONS FOR HELP AND THE POSITIONS FILLED IN THE MILWAUKEE OFFICE DURING THE YEAR ENDING JUNE 28, 1902.

Female—Milwaukee.

CLASSIFICATION OF POSITIONS.	NUMBER OF APPLICATIONS FILED.		Number of positions filled.
	For employment.	For help.	
Agents	1	1	1
Bakers	1		
Bookkeepers	2	2	2
Bottlers	2	2	2
Cash girls	5	22	3
Cashiers	1		
Chambermaids	26	22	17
Chore girls	1	1	1
Clerks	28	3	3
Cooks	87	42	29
Cook (first)	2	2	2
Cook (second)	1	1	1
Dining room girl	38	50	31
Dishwasher	6	6	6
Domestics	203	245	184
Dressmaker	2		
Factory hands	55	208	44
Governess	2	2	1
Hotel help	3	8	3
Housekeeper	19	9	5
Janitor	3		
Kitchen girl	60	62	57
Laundry girl	2	4	2
Laundry hands	4	6	4
Laundresses	3	4	3
Nurse girl	4	5	4
Nurses	8		
Packers and markers	9	9	9
Printers	2	1	1
Scrub women	25	21	18
Seamstresses	9	11	5
Servants	51	67	40
Sewing girl	1	1	1
Sorters	2	2	2
Stenographers	12	1	1
Walters	18	25	10
Washwomen	25	23	22
Totals	673	866	511

The foregoing two tables show the work of the Free Employment office in Milwaukee during the first year of its existence. The first in order gives the number of the male applicants and their occupations, the applications for help, and the number of positions filled. The second table in order show the corresponding facts for the females.

In the table for the males it is seen that the applicants for employment during the year numbered 3,936; that the applicants for help numbered 3,424 and that 2,674 positions were filled. Of the 3,936 applicants for employment 67.9 per cent. thus secured positions; while of those who were looking for help 78.1 per cent. secured such help. Those who were seeking work exceeded the help sought by 512 persons.

Of the positions filled the greatest number is in that of "laborers," in fact they constitute practically one half of all the positions filled. Factory hands is the next in importance followed by farm hands and teamsters. This also holds good with respect to applications for help and employment. In these occupations the demand as well as the supply was the greatest and our work the most effective.

The table for the females shows that the number of the applicants for position was 673, that the applications for help numbered 866; and that 511 positions were filled. About 76 per cent. of those who sought work thus secured the same, while only about 59 per cent. of those who were looking for some one to employ were able to find what they were in search of.

Of the applicants for employment the greatest number came from those whose occupation was in the domestic service. The table shows that 203 sought employment as domestics, 6 as dishwashers, 26 as chambermaids, 37 as cooks, 60 as kitchen girls, 51 as servants, while there were others who sought work in occupations kindred to this service. Next in importance comes those who looked for employment to the factories. Clerks are perhaps the third in point of number.

The applicants for help in the domestic service and factory work also greatly outnumber all others. This is also true of the positions filled. Clerks, stenographers, bookkeepers, show a few but comparatively speaking the number is small.

The next two tables in order represent the business in the Superior office during the same period. By occupations they give, first the applications for employment, then in the same way the application for help, and lastly the positions filled.

SHOWING, BY OCCUPATIONS, THE NUMBER OF MALE APPLICANTS FOR EMPLOYMENT, THE APPLICATIONS FOR HELP, AND THE POSITIONS FILLED IN THE SUPERIOR OFFICE DURING THE YEAR ENDING JUNE 28TH, 1902.

Superior.

CLASSIFICATION OF POSITIONS.	NUMBER OF APPLICATIONS FILED.		Number of positions filled.
	For employment.	For help.	
Barn boss	1		
Bartender	1		
Bell boy	1	2	1
Blacksmiths	17	5	5
Blacksmith helpers		6	
Boiler washer		1	
Bookkeeper	5	1	1
Bricklayers		5	
Bridge Carpenters	4	4	4
Call boy		1	
Carpenters	81	97	79
Chore boys	2	2	2
Cooks	38	21	15
Cookees	2	1	1
Delivery boy	1		
Edgerman	2	4	2
Electricians	1	1	1
Engineers	34	5	5
Errand boy	8	3	3
Factory hands	46	65	45
Farm hands	15	13	10
Foreman (woods)	2		
Firemen	6	1	1
Harvesters	18	18	18
Haymakers	6	6	6
Hotel clerks	3	2	2
Hotel porters	4	4	4
Janitors	10	1	1
Laborers	3,659	3,674	3,651
Lathers		2	
Linemen	1	1	1
Lumber graders	3	8	3
Lumber shovers	6	6	6
Machine hands		2	
Machinists	1	1	
Miners	3	6	3
Night clerks	2	2	2
Office boy	3		
Office work	9		
Painters	7	9	6
Porters	10	9	9
Printers	1	1	1
Salesman	7		
Saw filer		1	
Sawmill hand	21	46	18
Sawyer	1		
Scalers	2		
Solicitors	1	2	1
Stenographers			
Tally men		3	
Teamsters	23	8	8
Timber estimators	1		
Wagon makers		6	
Watchmen	7	1	1
Wood choppers		200	
Total	4,077	4,257	3,916

SHOWING, BY OCCUPATION, THE NUMBER OF THE FEMALE APPLICANTS FOR EMPLOYMENT, THE APPLICATIONS FOR HELP AND THE POSITIONS FILLED IN THE SUPERIOR OFFICE DURING THE YEAR ENDING JUNE 28, 1902.

Superior.

CLASSIFICATION OF POSITIONS.	NUMBER OF APPLICATIONS FILED.		Number of positions filled.
	For employment.	For help.	
Chambermaid	18	20	12
Cooks	26	28	16
Day work	4	1	1
Dining room girl	48	87	46
Dishwashers	5	6	4
Domestics	128	237	123
Factory hands	2	2	2
Housekeeper	2	5	2
Housework	4	7	4
Kitchen girls	51	82	49
Laundry girl	2	4	2
Nurse girl	9	5	5
Office work	1		
Restaurant girl	1	5	1
Seamstresses	7	10	7
Sewing girls	4	6	3
Scrub girls	2	2	2
Stenographer	1		
Work (general)	1		
Total	316	504	279

The preceding two tables relate to the work in the Superior office. The first in order shows, among other things, that 4,077 applications for employment and 4,257 applications for help were filed, while 3,916 positions were filled. The greatest number by far in all cases was that of common labor—in fact, the proportion in this respect is much greater even than was the case in Milwaukee. Carpenters and factory hands were also quite numerous, and as seen from it this table includes males only.

The second table in order relates to the females. During the first year this office found employment for 279 females, while it received 316 applications for employment and 504 applications for help. In this case, as for Milwaukee, most of the applications filed and positions filled were in the domestic service or kindred occupations.

In comparing the work of the two offices the following appear to be the results:

The Milwaukee office received, when both males and females are included, 4,609 applications for employment, 4,290 applications for help and from these succeeded in filling 3,187 positions.

The Superior office, including males and females, received 4,393 applications for employment, 4,761 applications for help and filled 4,195 positions.

The Milwaukee office thus received 216 more applications for employment than Superior. In the other items, however, Superior is ahead. Thus, in the applications for help Superior leads by 471, and besides this filled 4,195 positions, as against 3,187 for Milwaukee, a difference in favor of the former of 1,004 positions.

SHOWING, BY OCCUPATIONS, THE TOTAL NUMBER OF THE MALE APPLICANTS FOR EMPLOYMENT, THE APPLICATIONS FOR HELP, AND THE POSITIONS FILLED IN THE OFFICES IN MILWAUKEE AND SUPERIOR COMBINED DURING THE YEAR ENDING JUNE 28, 1902.

CLASSIFICATION OF POSITIONS.	NUMBER OF APPLICATIONS FILED.		Number of positions filled.
	For employment.	For help.	
Agents	2		
Apprentices	53	43	32
Baker	4		
Baggageman	1	1	1
Barbers	1		
Barnman	25	25	23
Bartenders	8	1	1
Bell boy	13	14	12
Bench moulder	2	1	1
Blacksmith	35	16	13
Blacksmith's helper	19	20	8
Roller washer		1	
Book binder	2		
Bookkeeper	30	1	1
Bottle washer	1	1	1
Brass finishers	5	5	5
Brass polishers	4	4	5
Brewery hands	4	2	2
Bricklayers		5	
Bridge carpenters	4	4	4
Buffers	1	1	1
Buggy washers	1	1	1
Butcher	5	2	2
Buttermaker	1		
Cabin boy	1	1	1
Cabinetmakers	13	48	8
Call boy		1	
Canvassers	3	11	3
Carpenters	156	181	129
Chemist	1		

MALE APPLICANTS FOR EMPLOYMENT, APPLICATIONS FOR HELP,
AND POSITIONS FILLED, ETC.—Continued.

CLASSIFICATION OF POSITIONS.	NUMBER OF APPLICATIONS FILED.		Number of positions filled.
	For employment.	For help.	
Chore boy	32	33	28
Chore man	62	41	37
Cigarmakers	1		
Clerks	187	15	13
Clerks, grocer	5	1	1
Clerks, hotel	6	5	7
Clerks, office	1b		
Clerks, shipping	2		
Clerks, shoe	1		
Clerks, night	2	2	2
Clothing cutters	2		
Coachman	25	11	7
Coal passer	1	1	1
Collectors	25		
Confectioner	1	1	1
Cooks	63	40	29
Cookees	3	1	1
Coopers	2	10	1
Core makers	12	17	5
Dairy hands	6	5	4
Decorators	1		
Delivery boys	31	34	24
Delivery men	54	10	9
Dishwasher	36	25	25
Distributors	33	37	32
Draughtsmen	5		
Edgerman	1	1	1
Erecting engineer	1	1	1
Electric lineman	2	6	2
Electricians	7	3	2
Electrical engineer	1		
Elevator boys	7	2	2
Elevator man	8		
Elevator operator	7		
Engineers	75	9	8
Engravers	1	1	
Errand boy	25	15	14
Factory hands	553	528	415
Farm hands	223	220	185
Finishers	4	2	2
Firemen	64	26	21
Foremen (woods)	2		
Gardener	12	14	10
Handy men	18	14	13
Harness maker	1		
Harvesters	18	18	18
Haymakers	6	6	6
Horseman	3		
Horseshoer	1		
Hotel porters	3	8	
Iron workers	5	1	1
Janitors	35	7	6
Kitchenman	1		
Laborers	5,114	5,283	4,976
Lathe hands	1	1	1
Lathers	7	9	7

MALE APPLICANTS FOR EMPLOYMENT, APPLICATIONS FOR HELP,
AND POSITIONS FILLED, ETC.—Continued.

CLASSIFICATION OF POSITIONS.	NUMBER OF APPLICATIONS FILED.		Number of positions filled.
	For employment.	For help.	
Laundry man	4	2	2
Lineman	1	1	1
Lumber shovers	6	6	6
Lumber graders	3	8	3
Machine (apprentices)	2		
Machine hands		2	
Machinists	55	47	28
Machinists' helper	29	19	10
Mason	10	23	11
Mason's helper	1	1	1
Meat cutter	4	1	1
Messenger boy	3	4	3
Millwright	1	2	1
Miners	3	6	3
Moulders	43	49	24
Moulders (brass)	1		
Moulders' helpers	1		
Newspaper work	1		
Office boys		24	19
Office work	9		
Packers	6		
Painters	41	28	13
Pan washers	4	5	4
Pantry man	1	1	1
Paper hangers	2	3	1
Paper cutters	1		
Pattern makers		4	
Pipe fitters	1		
Platers	2		5
Plumbers	2		
Plumbers' helpers	4		
Polishers	1	1	
Porters	94	39	37
Pourers		10	
Printers	5	1	3
Proof readers	1		
Repairers, clothing		1	
Repairmen	1	2	1
Reporters	2		
Riggers	1	1	1
Roofers	1		
Salesman	36	3	3
Sausage maker	2	1	1
Saw filers		1	
Sawmill hands	22	48	18
Sawmill setters	1	1	1
Scalers	2		
Sealers	1		
Shinglers		2	
Shippers	1		
Shoe cutter	1		
Shoemaker	5	3	2
Shopman	1	1	1
Solicitors	31	27	19
Sorters (lumber)	1	1	1

MALE APPLICANTS FOR EMPLOYMENT, APPLICATIONS FOR HELP,
AND POSITIONS FILLED, ETC.—Continued.

CLASSIFICATION OF POSITIONS.	NUMBER OF APPLICATIONS FILED.		Number of positions filled.
	For employment.	For help.	
Stenographers	17	3	3
Steam fitters	1		
Stone cutter	1	1	1
Store room assistant	1	2	1
Structural iron workers		1	
Surveyors	1		
Switchman	1		
Tailors (apprentices)	2	2	2
Tailors	6	4	3
Tally men		3	
Tanners	6	5	4
Tannery hands		4	
Teamsters	205	170	150
Telegraphers	1		
Time keepers	2		
Timber estimator	1		
Tinners	1		
Tool makers	2	2	1
Tool dresser	1		
Trimmers (trees)	2	4	2
Typesetters	1		
Typewriter	1		
Undertaker's assistant	1		
Wagon maker	2	12	1
Walters	16	9	6
Warehouseman	3	1	1
Watchman	29	7	6
Weavers	2	4	1
Wholesale house	1		
Window washer	2	2	2
Wire workers	1	1	1
Wire weaver		1	
Wood carver	3	3	1
Wood chopper	5	205	4
Wood turner	2	1	1
Wood workers	3	5	2
Total	8,013	7,681	6,590

SHOWING, BY OCCUPATIONS, THE TOTAL NUMBER OF THE FEMALE APPLICANTS FOR EMPLOYMENT, THE APPLICANTS FOR HELP AND THE POSITIONS FILLED IN MILWAUKEE AND SUPERIOR COMBINED, DURING THE YEAR ENDING JUNE 28, 1902.

CLASSIFICATION OF POSITIONS.	NUMBER OF APPLICATIONS FILED.		Number of positions filled.
	For employment.	For help.	
Agents		1	
Baker	1		
Bookkeeper	3		
Bottlers	2	2	2
Cash girls	5	22	3
Cashier	1		
Chambermaids	44	42	29
Chore girl	1	1	1
Clerks	28	3	3
Cook	65	72	47
Cook (first)	2	2	2
Cook (second)	1	1	1
Day work	4	1	1
Dining room girl	86	137	77
Dish washers	11	12	10
Domestics	325	474	302
Dressmaker	2		
Factory work	57	210	46
Governess	2	2	1
Housekeeper	21	14	7
Hotel help	3	8	3
Housework	4	7	4
Janitor	3		
Kitchen girls	111	144	106
Laundress	6	10	6
Laundry girls	5	8	5
Nurses	8		
Nurse girls	12	9	8
Office work	1		
Packers and markers	9	9	9
Printers	2	1	1
Restaurant girl	1	2	1
Scrub woman	27	23	20
Seamstress	16	21	12
Servants	51	67	40
Sewing girls	5	7	4
Sorters	2	2	2
Stenographers	13	1	1
Waiters	18	25	10
Wash woman	25	23	22
Work girls	1		
Total	989	1,570	790

In the preceding two tables, the first of which relates to males and the second to females, have been combined all the figures for the two offices. These tables thus show for the males and females, respectively, the total number of the applications for employment and help filed and the number of positions filled.

The table for the male applicants show, among other things, that the total applications for employment was 8,013; that the applications for help numbered 7,681, and that 6,590 positions were filled.

The greatest number of the applications for employment were received from "common labor." Factory hands are the next in order in this respect, with farm hands, teamsters and carpenters in the order named. There are several other occupations in which figures are quite high, but those given are in the lead. What is true in this respect for the applications for employment, is practically true for the applications for help and the positions filled.

The table for the female applicants show that the applications for employment numbered 989; that the applications for help numbered 1,370, and that the positions filled numbered 790.

Domestic and kindred occupations show the greatest number of applicants and positions filled.

In the following table the male applicants for employment have been classified according to the number of positions filled. This classification will be found interesting and should be studied in connection with the basic table.

CLASSIFICATION OF POSITIONS FILLED.

Males.

CLASSIFICATION.	Number occupations	NUMBER.			PER CENT.		
		App. for employment.	App. for help.	Positions filled.	App. for employment.	App. for help.	Positions filled.
50 positions and over	5	6,251	6,382	5,855	78.01	83.09	88.84
25 positions but under 50....	8	428	306	248	5.34	3.97	3.76
15 positions but under 25....	8	269	251	166	3.36	3.27	2.52
5 positions but under 15....	25	674	331	213	8.41	4.31	3.23
Under 5 positions filled	64	249	371	108	3.11	4.83	1.65
Applications not filled	67	142	41	.....	1.77	.53	.....
Total	177	8,013	7,681	6,590	100.00	100.00	100.00

This table is a sort of classified summary of the table for the total male applicants for both offices. The classifications are based upon the positions filled,

The first class in order includes all occupations in which 50 or more positions were filled. The positions filled in this class were 5,855, or 88.84 per cent, of the total of all classes making an average of 1,171 positions to each of the 5 occupations. The applications for help in this class numbered 6,382, or 83.09 per cent. of the total; and the applications for employment numbered 6,251, or 78.01 per cent. of the total.

The occupations in this class were carpenters, factory hands, farm hands, laborers, and teamsters.

The second class, that for 25 but under 50 positions, includes 8 occupations, 428 applications for employment, 305 applications for help, and 248 positions filled. The occupations in this case were: Apprentices, chore boy, chore man, cooks, distributors, dish washers, machinists and porters.

The third class in order that for 15 but under 25 positions filled includes 8 occupations, 269 applications for employment, 251 applications for help and 166 positions filled. The occupations were: Barnmen, delivery boy, firemen, harvest hands, moulders, office boy, saw mill hands, and solicitors.

The two classes which follow include 5 but under 15 positions, and under 5 positions. The first of these includes 25 occupations and 213 positions filled, the second includes 64 positions and 108 positions filled.

The last class in order made up all occupations in which applications for employment and help were filed, but in which no position was filled. It includes 67 occupations, and the applicants for employment numbered 142, while the applicants for help numbered 41.

In the following two tables the male and female persons are classified in such a way as to make comparisons easier.

CLASSIFICATION OF POSITIONS FILLED.

Females.

CLASSIFICATION.	Num- ber oc- cupa- tions.	NUMBER.			PER CENT.		
		App. for em- ploy- ment	App. for help.	Posi- tions filled.	App. for em- ploy- ment.	App. for help.	Posi- tions filled.
50 positions and over.....	3	522	755	485	53.05	55.39	61.71
25 but under 50.....	4	217	291	162	22.05	28.63	20.61
15 but under 25.....	2	52	46	42	5.29	3.38	5.34
5 but under 15.....	8	98	108	67	9.96	7.92	8.52
Under 5.....	15	75	62	50	7.62	4.55	3.82
Under 5 not filled.....	9	20	1	.....	2.03	.08	.....
Total	41	984	1,363	786	100.00	100.00	100.00

The preceding table is a summary relating to the female applicants. It includes those for both offices, and the classification, as in the table for the males, is based upon the positions filled.

The first class in order that for 50 positions and more filled, includes only 3 occupations, but while weak in point of occupations it is strong in point of the number of the applications, and positions filled. Thus it is seen that this class includes considerably over one-half of the applications and nearly two-thirds of the positions filled.

The class "25 but under 50" has 4 occupations, 22.05 per cent. of the applications for employment, 28.63 per cent. of the applications for help, and 20.61 per cent. of the positions filled.

The remaining classes include but a small proportion of the applicants and positions filled.

The tables which follow deal with the respective number and per cent of the male and female applicants for each office as well as for the total of both offices.

NUMBER AND PER CENT. OF APPLICATIONS FOR EMPLOYMENT AND
HELP AND POSITIONS FILLED IN THE MILWAUKEE OFFICE DURING
YEAR ENDING JUNE 28, 1902.

Milwaukee.

CLASSIFICATION.	NUMBER.			PER CENT.		
	App. for employ- ment.	App. for help.	Posi- tions filled.	App. for employ- ment.	App. for help.	Posi- tions filled.
Male	3,936	3,424	2,674	85.40	79.81	83.90
Female	673	866	511	14.60	20.19	16.10
Total	4,609	4,290	3,185	100.00	100.00	100.00

This table relates to the Milwaukee office. In this office applications for employment numbered 4,609, of which 3,936, or 85.40 per cent. were for male, and 673, or 14.60 per cent. were for female help.

The applications for help was 4,290. Of this number 3,424, or 79.81 per cent. were for male, and 866, or 20.19 per cent. for female help.

The positions filled number 3,185, of which 2,674, or 83.90 per cent were with male and 511, or 16.10 per cent. with female help.

NUMBER AND PER CENT. OF APPLICATIONS FOR EMPLOYMENT AND
HELP AND POSITIONS FILLED IN THE SUPERIOR OFFICE DURING
YEAR ENDING JUNE 28, 1902.

Superior.

CLASSIFICATION.	NUMBER.			PER CENT.		
	App. for employ- ment.	App. for help.	Posi- tions filled	App. for employ- ment.	App. for help.	Posi- tions filled.
Male	4,077	4,257	3,916	92.87	89.42	93.35
Female	316	504	279	7.13	10.58	6.65
Total	4,393	4,761	4,195	100.00	100.00	100.00

The total number of the applications for employment filed in the Superior office was 4,393, of which 92.87 per cent. were from male and 7.13 per cent. from female persons.

Total applications for help were 4,761. Of these 89.42 per cent. were for male and 10.58 per cent. for female help.

In this office 4,195 positions were filled. of which 3,916, or 93.35 per cent. were filled with male help and 279 or 6.65 per cent. with female help.

NUMBER AND PER CENT. OF APPLICATIONS FOR EMPLOYMENT AND HELP AND POSITIONS FILLED IN MILWAUKEE AND SUPERIOR OFFICES FOR THE YEAR ENDING JUNE 28, 1902.

Total.

CLASSIFICATION.	NUMBER.			PER CENT.		
	App. for employ- ment.	App. for help.	Posi- tions filled.	App. for employ- ment.	App. for help.	Posi- tions filled.
Male	8,013	7,681	6,590	89.00	84.86	89.29
Female	989	1,370	790	11.00	15.14	10.71
Total	9,002	9,051	7,380	100.00	100.00	100.00

This table gives the totals for both the Milwaukee and Superior offices. It shows that of the 9,002 applicants for employment 8,013, or 89 per cent. were males and 989, or 11 per cent. were females.

Of the 9,051 applications for help 7,681, or 84.86 per cent. were for male and 1,370, or 15.14 per cent. for female help.

In all 7,380 positions were filled in both offices. Of these 6,590, or 89.29 per cent. were filled with male, and 790, or 10.71 per cent with female help.

The next preceding three tables are a summary of the totals as well as showing the applicants by sex. The first in order gives the males, females and total of both for the Milwaukee office; the second gives the same facts for the Superior office; and the third or last gives the totals or figures for both offices when combined.

In both offices the applications received and positions filled are reported into this bureau at the end of each week and the records of the same closed. It has often happened in the Milwaukee office, however, that the applications have been filled later on. In such cases the old application has been regarded as a new one and counted again. Thus, while not effecting in any way the number of the positions filled or reported in these pages, may, in one sense, or if the persons who make them

should be counted instead of the applications made by them, be said to have caused some duplications in the applications reported. It is of course plain that during a given period the same person may apply more than once. The question when this occurs is whether to count the subsequent visits or applications. In these records each applicant was counted regardless of whether the applicants had applied previously or not. Whether this has caused any duplications depends entirely upon whether the applicants or the applications should be counted. In order to open a way for either method the following lists have been prepared showing the number of male and female applicants respectively who secured positions on a subsequent application.

Male.

Apprentices	9
Barnman	2
Blacksmith	3
Blacksmith's helper	6
Bench moulder	1
Bell boy	1
Cabinetmakers	5
Carpenters	22
Chore boy	1
Chore men	3
Clerks	3
Clerks, grocer	1
Clerks, hotel	1
Coachman	5
Cooks	5
Coremakers	5
Dairyman and wife	1
Delivery boy	1
Delivery man	1
Distributors	3
Electricians	1
Engineer	1
Erecting engineer	1
Errand boy	2
Factory hand	115
Farm hand	20
Finishers	2
Firemen	4
Gardeners	3
Handy man	1
Iron workers	1
Janitors	1
Laborers	133
Machinists	14
Machinists' helper	5
Mason	2
Messenger boy	1
Millwright	1
Moulders	19
Office boy	5

Painters	5
Pan washer	1
Paper hanger	1
Porters	3
Repair men	1
Sausage maker	1
Shoemaker	1
Solicitor	13
Stenographers	2
Store room	1
Tailors	2
Teamsters	17
Tool maker	1
Wagon maker	1
Walter	1
Watchman	1
Weaver	1
Wood carver	1
Wood chopper	1
Wood turners	1
Total	467

POSITIONS SECURED AGAINST APPLICATIONS PREVIOUSLY FILED, OR
ON A SUBSEQUENT APPLICATION.

Females.

Cash girl	2
Cooks	5
Dining room girl	7
Domestics	12
Factory hands	11
Housekeeper	3
Kitchen girl	2
Printer	1
Scrub woman	4
Seamstress	1
Servants	12
Waitress	4
Total	64

From these two tables we see that 467 male persons and 64 female persons secured positions after the records of their first application had been closed and reported in to the bureau, or, in other words positions were found for them on a subsequent application. If this has caused any duplication, then, in order to get at the absolute number of applications for employment and help, these figures for Milwaukee and for the total for both places should be reduced by the above figures.

The report for Milwaukee shows 3,939 applications for employment and 3,424 applications for help. If these figures are reduced by 467 the male applications for employment will number 3,469 and those for help 2,957.

The Milwaukee reports also show for the females 673 appli-

cations for employment and 802 for help. If these figures are reduced by 64 the balance will be 609 and 802 respectively.

The Superior office is not in any affected by this. But the totals for both offices should of course be reduced by the same figures.

After this reduction is made the figures for the males will read: Applications for employment 7,546; applications for help 7,214; and the positions filled 6,590.

The figures in the totals for the females after being reduced by 64 will read: applications for employment 925; applications for help 1,299; positions filled 790.

The totals for both males and females after this correction should read: applications for employment 8,471; applications for help 8,520; positions filled 7,380.

As said the positions filled are in no way affected by these corrections.

FACTS FROM THE APPLICATIONS FOR EMPLOYMENT.

As already explained, those who apply for employment are requested to fill out an application for the same which contains a number of questions that bear more or less remotely upon the present condition of the applicant. The real purpose of these questions is to obtain information that may be of value for statistical purposes, or that can be used as means through which some additional light concerning the condition of the big army of wage-earners, can be presented to the students and to the public. It should be understood, however, that the applicants are not obliged to fill out these applications in full. It is not a condition upon which their case will receive attention. The information they impart, outside of the mere facts that are absolutely necessary in order to obtain employment for them, is given voluntarily.

From about July 1st, 1901, to about January 1st, 1902, or during a period of six months, 3,890 persons, or a fraction over 82 per cent. of the total number who applied for employment, filled out one of these application blanks more or less fully. The information in these blanks has been compiled in eleven

tables which, together with an analysis of the same, is presented in this part.

The 3,890 persons included were classified into 36 separate or distinct trades or occupations and 5 miscellaneous classes. The 36 separate occupations need no explanation, as the name indicates their nature. In the case of the 5 miscellaneous classes, however, the situation is different, as each one of these classes is made up of persons of various occupations. Thus numbers 37 and 38 include the reports of 79 and 278 persons, respectively, who reported that they had no regular occupation but found employment at anything they could get. Number 39 was compiled from the reports of upholsterers, millers, electricians, wagonmakers, masons, harnessmakers, coopers, plumbers, book binders, shoemakers, roofers, tinnern, foundrymen, all of which come under skilled trades. Number 40 includes photographers, druggists, collectors, artists, musicians, reporters. Number 41 includes gardeners, cruisers, lumber scalers, barbers, nurses, seamstresses, florists, bridgemen, bell boys, laundrymen, watchmen, packers, deliverymen, bottlers, liverymen, stranders, soldiers, chippers, miners and woods foremen. Number 39 includes 42 persons, number 40 includes 32 persons, and number 41 includes 77 persons. These classifications are far from satisfactory for the best statistical purposes, but owing to the small number of reports in each occupation, and to other circumstances, it is the best that could be made without treating each occupation separately.

As stated above, the facts reported by the applicants for employment were compiled and arranged in eleven tables, each of which cover one page, and may be described as follows:

Table I shows the respective number of persons who resided in the city where the application was made or outside of said city; the respective number who were native born, naturalized, and not naturalized; and the respective number who were married and single.

Table II shows the respective number of persons whose last employment was in the city and outside of the city; the number who were born in Wisconsin, in other United States, and in other countries; and the number who desired employment in

their trade or occupation, and at some other work than their trade.

Table III gives the respective number who were members and who were not members of some labor or trade union; the number who were willing to accept employment away from the place or city where they lived and the number who were not willing to do so; and the number who left the last employer for a stated cause.

Table IV shows the respective number who were in good, fair, and poor health; the number who could read and write; and the respective number who could furnish references, and who could not furnish any.

Table V gives the classified age of the persons who were seeking employment. The classifications in this case run from 15 years and under to over 55 years of age.

Table VI shows the classified years those who sought employment had lived in this country.

Table VII relates to the length of time those who applied for employment had resided in this state. In this case the years of residence were classified in the same way, or upon the same basis, as in the table which precedes it, showing the years of residence in this country.

Table VIII shows the number of those seeking work who were married and the number of children to each family.

Table IX shows the number of families and the number of other persons than children each of these were supporting.

Table X shows the classified weekly earnings received by the employes from their last employer. The classification of earnings employed here is the same as that employed for our manufacturers' returns and also used in other parts of this report.

Table XI shows the classified time the different applicants had been out of employment, and the classified time they had remained with their last employer.

In the following pages these eleven tables are presented in full, and these presentations in turn are followed by a brief analysis of the main facts given in the tables:

PLACE OF RESIDENCE, CITIZENSHIP, CONJUGAL RELATION.

Table I.

OCCUPATION.	Number included.	RESIDENCE.			CITIZENSHIP.			MARRIED OR SINGLE.		
		City.	Outside city.	No answer.	Native born.	Naturalized.	Not naturalized.	Married.	Single.	No answer.
1. Baker	10	10			4	2	2	3	6	1
2. Blacksmith	21	20	1		13	6	2	8	12	1
3. Blacksmith's helper	10	9	1		8	1	1	3	6	1
4. Bookkeeper	65	57	8		51	13	1	21	41	3
5. Brewer	8	8			8	3			6	2
6. Butcher	8	8			4	4		3	5	
7. Carpenter	58	54	4		30	21	7	34	17	7
8. Cigarmaker	9	9			8	1		4	4	1
9. Clerk	60	57	3		45	12	3	18	38	4
10. Coachman	10	10			8	2		4	6	1
11. Cook	76	63	13		59	11	6	26	43	7
12. Domestic	162	150	12		127	26	9	13	132	17
13. Engineer	58	45	13		38	19	1	37	17	4
14. Factory hand	147	141	6		121	17	9	37	97	13
15. Farm hand	44	4	40		39	4	1	9	33	2
16. Fireman	31	27	4		20	11		8	23	
17. Hotel worker	18	16	2		11	5	2	2	16	
18. Janitor	8	8			2	5	1	5	2	1
19. Laborer	2,260	833	1,421	6	1,237	732	291	281	1,892	87
20. Machinist	40	38	2		28	9	3	13	25	2
21. Messenger boy	8	8			7		1		4	4
22. Moulder	23	18	4	1	15	7	1	7	16	
23. Painter	54	52	2		38	14	2	18	31	5
24. Porter	12	12			7	3	2	3	9	
25. Printer	8	7	1		8			1	7	
26. Railroad hands	10	10			10			5	5	
27. Sailor	19	19			9	9	1	7	12	
28. Salesman	21	21			16	3	2	9	12	
29. Steam fitter	11	10	1		8	1	2	2	9	
30. Stenographer	10	8	2		10			1	8	1
31. Student	11	9	2		10	1			9	2
32. Tailor	9	9			4	5		5	4	
33. Tanner	16	16			13	3		4	8	4
34. Teacher	11	10	1		9	1	1	4	6	1
35. Teamster	45	40	5		36	8	1	14	31	
36. Walter	11	11			11			2	9	
37. Miscellaneous	79	72	6	1	60	16	3	32	43	4
38. Miscellaneous	278	271	7		249	19	10	46	172	60
39. Miscellaneous	42	39	3		28	9	5	14	25	3
40. Miscellaneous	32	27	5		22	8	2	11	19	2
41. Miscellaneous	77	64	13		51	24	2	21	53	3
Totals	3,890	2,300	1,582	8	2,481	1,005	374	735	2,912	243

SHOWING WHETHER LAST EMPLOYMENT WAS IN OR OUTSIDE THE CITY, PLACE OF BIRTH AND KIND OF EMPLOYMENT WANTED.

Table II.

OCCUPATION.	Number included.	Last Em- ployed.			Place of Birth.			Kind of Work Wanted.		
		In city.	Outside city.	No answer.	Wisconsin.	Other U. S.	Other countries.	At their trade.	Other work.	No answer.
1. Baker	16	4	4	2	2	2	6	2	19	1
2. Blacksmith	21	13	2	6	12	7	11	14	1	1
3. Blacksmith's helper	10	6	2	2	7	1	2	5	1	1
4. Bookkeeper	65	35	19	11	35	10	20	17	42	2
5. Brewer	8	7		1	3		5		4	1
6. Butcher	8	6	2		3	5		4	5	
7. Carpenter	58	21	7	30	11	13	34	35	18	5
8. Cigar maker	9	7		2	5	2	2	1	1	1
9. Clerk	60	34	10	16	36	8	16	34	12	1
10. Coachman	10	9		1	4	2	4	5	1	1
11. Cook	76	28	33	15	17	27	32	58	12	6
12. Domestic	162	72	19	70	67	26	69	102	44	16
13. Engineer	58	33	14	11	19	17	22	17	26	1
14. Factory hand	147	198	26	14	69	29	49	53	76	19
15. Farm hand	44	14	20	10	21	9	14	19	20	5
16. Fireman	31	17	3	11	7	14	10	11	13	7
17. Hotel worker	18	11	5	2	5	5	8	11	4	3
18. Janitor	8	7		1	2		6	2	4	1
19. Laborer	2,260	408	1,467	385	327	1,169	824	2,260		
20. Machinist	40	32	7	1	17	7	16	18	16	6
21. Messenger boy	8	6	1	1	6	1	1		5	2
22. Moulder	22	13	7	3	8	6	9	8	13	1
23. Painter	54	44	4	6	22	13	19	11	38	5
24. Porter	1	11	1		7		6	3	8	1
25. Printer	8	5	1	2	7	1		3		2
26. Railroad hands	10	6	4		6	4		1	8	1
27. Sailor	19	7	11	1	1	5	13		16	3
28. Salesman	21	14	3	4	9	7	5	9	16	1
29. Steam fitter	11	10	1		4	4	3	2	9	
30. Stenographer	10	4	2	4	6	4		7		
31. Student	11	4		7	9	1	1		10	1
32. Tailor	9	8	1		2	2	5	4	4	1
33. Tanner	16	12		4	6	3	7	3	11	2
34. Teacher	11	3	6	2	6	3	2	2	9	
35. Teamster	45	29	7	9	25	7	13	26	15	4
36. Walter	11	8	1	2	6	2	3	3	7	1
37. Miscellaneous	79	47	15	19	29	23	27	79		
38. Miscellaneous	278	143	25	110	131	54	93	278		
39. Miscellaneous	42	30	7	5	19	8	15	42		
40. Miscellaneous	32	22	7	3	18	4	10	32		
41. Miscellaneous	17	44	16	17	36	13	28	77		
Totals	3,890	1,343	1,757	790	1,023	1,458	1,409	3,278	490	12

SHOWING WHETHER MEMBER OF LABOR ORGANIZATION, AND WILLING TO GO AWAY FROM CITY FOR EMPLOYMENT, CAUSE OF LEAVING LAST EMPLOYER.

Table III.

CLASSIFICATION.	Number included.	Member of Labor Union.			Willing to Work Away From City.			Cause of Leaving Last Employer.					
		Yes.	No.	No answer.	Yes.	No.	No answer.	Wanted change.	Job completed.	Sickness.	Other causes.	No answer.	
1. Baker	10	7	3		4	4	2	1			2	7	
2. Blacksmith	21	17	3		10	7	4	2	2	1	10	6	
3. Blacksmith's h'lp'r	10	8	2		4	6					4	6	
4. Bookkeeper	65	52	12		44	17	4		3	2	41	19	
5. Brewer	8	1	4	3	5	2	1		1		4	3	
6. Butcher	8	2	5	1	8			1	1		3	3	
7. Carpenter	58	4	48	6	27	23	8	3	4	4	24	23	
8. Cigar maker	9	3	2	4	1	6	2				1	8	
9. Clerk	60	7	40	13	35	20	5	3	4	7	26	20	
10. Coachman	10		7	3	6	3	1	2			5	3	
11. Cook	76	4	52	20	54	11	11	5	9	7	27	28	
12. Domestic	162		94	68	20	82	60	12	7	9	52	82	
13. Engineer	58	9	41	8	46	9	3	1	7	8	20	22	
14. Factory hand	147	13	99	35	67	58	22	4	1	7	86	49	
15. Farm hand	44	2	32	10	30	7	7	2	4		17	21	
16. Fireman	31	1	24	6	19	10	2		2	2	18	9	
17. Hotel worker	18		11	7	8	7	3	2	1	2	5	8	
18. Janitor	8	1	5	2		6	2				6	3	
19. Laborer	2,260	43	2,015	202	1,850	246	164	314	386	93	638	779	
20. Machinist	40	9	24	7	23	13	4		2	1	21	16	
21. Messenger boy	8		1	7	1	7			2		5	1	
22. Moulder	23	4	16	3	14	9		3	1	4	6	9	
23. Painter	54	3	40	11	30	15	9		4		27	23	
24. Porter	12		8	4	4	6	2		1	2	7	2	
25. Printer	8	2	5	1	3	3	2				1	6	
26. Railroad hand	10	1	8	1	5	4	1		1	2	4	3	
27. Sailor	19	2	15	2	13	6			4	3	6	6	
28. Salesman	21		17	4	16	3	2		4	3	9	5	
29. Steam fitter	11		10	1	9	2			2		9		
30. Stenographer	10		6	4	8	2		1	1		2	6	
31. Student	11		6	5	6	3	2				3	8	
32. Tailor	9	1	7	1	4	5			1	4	4	4	
33. Tanner	16		10	6	4	8	4	1		2	5	8	
34. Teacher	11		8	3	10	1			2	3	2	4	
35. Teamster	45	4	32	9	26	16	3	1	1	2	18	23	
36. Walter	11		9	2	4	6	1		1		5	7	
37. Miscellaneous	79	5	58	16	46	13	20	1	1	8	34	35	
38. Miscellaneous	278	4	126	148	114	80	84	8	5	23	107	175	
39. Miscellaneous	42	1	21	20	24	14	4	1	1	1	20	19	
40. Miscellaneous	32		26	6	20	8	4		2	3	12	14	
41. Miscellaneous	77	2	52	23	54	13	10		7	8	29	32	
Totals	3,890	130	3,068	692	2,676	761	453	368	472	211	1,373	1,466	

SHOWING CONDITIONS AS TO HEALTH, ILLITERACY AND REFERENCES.

Table IV.

OCCUPATION.	Number included.	HEALTH.				READ AND WRITE.			REFERENCES.		
		Good.	Fair.	Poor.	No answer.	Yes.	No.	No answer.	Yes.	No.	No answer.
1. Baker	10	8	...	...	2	8	...	2	...	10	...
2. Blacksmith	21	18	2	...	1	19	1	1	5	...	5
3. Blacksmith's helper	10	10	...	...	...	8	1	1	1	9	...
4. Bookkeeper	65	63	1	1	...	65	...	...	49	14	...
5. Brewer	8	7	...	...	1	6	1	1	...	8	...
6. Butcher	8	8	...	...	...	8	...	...	4	4	...
7. Carpenter	58	46	5	2	5	42	...	16	9	49	...
8. Cigar maker	9	6	1	1	1	8	...	...	...	...	...
9. Clerks	60	53	3	...	4	48	1	11	32	28	...
10. Coachman	10	10	...	...	...	10	...	...	1	...	9
11. Cooks	76	65	...	...	11	63	1	12	18	...	56
12. Domestics	162	110	5	1	46	86	8	73	46	2	114
13. Engineer	58	53	2	...	3	54	...	4	31	...	27
14. Factory hand	147	123	8	2	14	130	3	14	21	...	126
15. Farm hand	44	39	...	...	5	39	...	5	7	...	37
16. Fireman	31	29	...	...	2	30	...	1	16	...	15
17. Hotel worker	18	16	1	...	1	17	...	1	6	...	12
18. Janitors	8	6	1	...	1	7	...	1	2	...	6
19. Laborer	2,260	2,112	19	3	126	2,053	85	122	1,717	443	100
20. Machinist	40	40	...	...	...	40	...	...	7	33	...
21. Messenger boy	8	8	...	...	...	8	...	...	...	8	...
22. Moulder	23	22	1	...	...	23	...	...	2	...	21
23. Painter	54	48	...	...	6	46	...	8	12	...	42
34. Teacher	11	11	...	...	...	11	...	...	9	2	...
25. Printer	8	5	1	...	2	6	1	1	2	6	...
26. Railroad hands	10	10	...	...	...	10	...	...	3	7	...
27. Sailor	19	18	1	...	...	18	1	...	2	17	...
28. Salesman	21	21	...	...	...	21	...	...	12	9	...
29. Steam fitter	11	8	3	...	...	11	...	...	...	...	11
30. Stenographer	10	10	...	...	...	10	...	...	2	...	8
31. Student	11	10	1	...	...	8	...	3	3	...	8
32. Tallor	9	9	...	...	...	9	...	...	3	6	...
33. Tanner	16	12	...	...	4	8	...	8	1	...	15
34. Teacher	11	11	...	...	...	11	...	...	9	2	...
35. Teamster	45	35	1	...	9	40	...	5	1	...	44
36. Walter	11	10	...	...	1	10	...	1	...	...	11
37. Miscellaneous	79	71	3	...	5	71	...	8	28	...	51
38. Miscellaneous	278	214	6	3	55	213	3	62	35	...	243
39. Miscellaneous	42	39	2	...	1	34	2	6	9	15	...
40. Miscellaneous	32	31	...	...	1	30	1	1	16	10	...
41. Miscellaneous	77	71	3	...	3	66	3	8	18	24	...
Totals	3,890	3,495	77	14	310	3,404	107	379	2,134	712	1,044

CLASSIFIED AGE OF PERSONS SEEKING EMPLOYMENT.

Table V.

Occupation.	Number included.	15 years and under.	16-20 years.	21-25 years.	26-30 years.	31-35 years.	36-40 years.	41-45 years.	46-50 years.	51-55 years.	Over 55 years.	No answer.
1. Baker	10	1	...	1	2	1	...	1	...	...	...	4
2. Blacksmith	21	...	...	3	4	4	3	1	1	...	2	3
3. Blacksmith's helper	10	...	2	4	...	...	1	1	...	...	...	...
4. Bookkeeper	65	17	11	11	5	4	3	3	5	1	5	5
5. Brewer	8	...	4	2	...	...	...	...	...	...	...	2
6. Butcher	8	...	4	...	1	...	2	...	...	1	...	...
7. Carpenter	58	...	2	3	5	10	2	6	12	13	...	5
8. Cigarmaker	9	...	1	1	...	...	2	2	...	1	...	2
9. Clerks	60	20	14	9	4	3	1	1	4	...	...	4
10. Coachman	10	...	1	3	1	...	2	1	...	...	...	2
11. Cooks	76	1	7	14	15	11	7	3	3	2	4	9
12. Domestic	162	...	77	43	17	6	1	...	...	...	1	17
13. Engineer	58	...	1	1	10	9	11	7	8	2	3	6
14. Factory hand	147	1	44	44	17	10	5	1	...	7	...	18
15. Farm hand	44	...	6	9	4	4	4	1	1	1	1	13
16. Fireman	31	...	1	7	7	6	2	3	...	...	...	5
17. Hotel worker	18	...	3	5	2	1	...	2	1	2	...	2
18. Janitor	8	...	...	...	...	...	1	1	1	2	1	1
19. Laborer	2,260	2	239	538	407	309	217	182	102	...	98	136
20. Machinist	40	...	2	13	4	6	4	1	3	1	...	6
21. Messenger boy	8	4	4	...	...	...	...	...	...	...	...	...
22. Moulder	23	...	5	4	4	3	2	2	1	...	...	2
23. Painter	54	...	3	12	10	5	3	2	4	3	...	12
24. Porter	12	...	5	5	...	...	...	...	...	...	2	...
25. Printer	8	1	4	3	...	...	...	...	...	...	...	...
26. Railroad hand	10	...	...	3	2	5	...	...	...	...	...	...
27. Sallor	19	...	2	2	2	5	1	1	1	...	3	2
28. Salesman	21	...	1	4	2	3	2	...	4	...	2	3
29. Steam fitter	11	...	5	1	...	...	2	...	...	...	1	2
30. Stenographer	10	...	2	5	2	...	...	...	...	...	...	1
31. Student	11	...	8	3	...	...	...	...	...	...	...	...
32. Tailor	9	...	...	4	...	3	...	1	1	...	...	...
33. Tanner	16	...	2	5	...	...	3	1	1	...	...	4
34. Teacher	11	...	...	3	1	2	2	...	2	...	...	1
35. Teamster	45	...	10	6	2	4	4	3	2	1	...	13
36. Waiter	11	...	2	2	1	2	...	...	...	...	...	4
37. Miscellaneous	79	2	12	10	11	3	9	7	6	10	2	7
38. Miscellaneous	278	13	78	47	25	10	15	13	4	4	...	68
39. Miscellaneous	42	...	9	8	10	4	4	1	...	...	1	5
40. Miscellaneous	32	1	6	10	2	...	4	4	1	...	2	2
41. Miscellaneous	77	2	19	12	8	8	7	5	3	3	7	3
Totals	3,890	28	608	865	600	443	359	257	166	62	131	371

CLASSIFIED YEARS IN THIS COUNTRY.

Table VI.

Occupation.	Less than 1 year.	1-5 years.	6-10 years.	11-15 years.	16-20 years.	21-25 years.	26-30 years.	31-35 years.	36-40 years.	Over 40 years.
1. Baker	2				2		1			
2. Blacksmith	1		3	1	1	3		2		
3. Blacksmith's helper				1	1					
4. Bookkeeper		3	2	4	3	2	3			2
5. Brewer		1		2	1					
6. Butcher				2	1					1
7. Carpenter	3	1	7	6	1	3	1	3	2	3
8. Cigar maker						1				
9. Clerk	2	1	6		1			1		3
10. Coachman			1		3	1				
11. Cook		3	3	2	9	3	3		2	1
12. Domestic	8	14	6	8	14					
13. Engineer		1	1	1	8		1	1	4	3
14. Factory hand	1	2	11	5	11	7	2			1
15. Farm hand		1	2	3	4					
16. Fireman				4	2	3		1		
17. Hotel worker	1	1	2	2	2	1	1		1	
18. Janitor				1	1			2	1	1
19. Laborer	37	142	158	118	146	93	46	36	11	16
20. Machinist		4	2	2	1	1	2	1		
21. Messenger boy			1							
22. Moulder		1	2	1	2	3				
23. Painter		2	2	2	4	4	7	3		
24. Porter		1			2	1			1	
25. Printer										
26. Railroad hand							1	2	2	
27. Sailor			1	1	3	3				
28. Salesman	1						2	1		
29. Steam fitter			2		1	2				
30. Stenographer										
31. Student			1							
32. Tailor			2	1				2		
33. Tanner			1		1	2	1			
34. Teacher	1	1			1					
35. Teamster		1	3	1	7	2		1	1	
36. Walter			1				1			
37. Miscellaneous	1		2	6	4	3	3	3	2	1
38. Miscellaneous	25	26	18	17	11	2	3		1	2
39. Miscellaneous	2	3	2	1	3	1				1
40. Miscellaneous	1	1	2		2	1	1		1	1
41. Miscellaneous	2	2	6	6	6	2		1	2	2
Totals	88	212	250	248	259	144	79	60	31	38

CLASSIFIED YEARS IN THIS STATE.

Table VII.

Occupation.	Since birth.	Less than 1 year.	1-5 years.	6-10 years.	11-15 years.	16-20 years.	21-25 years.	26-30 years.	31-35 years.	36-40 years.	Over 40 years.
1. Baker	2	2	1	1	1	2	2	1	1	1	1
2. Blacksmith	3	3	5	2	1	2	2	1	1	1	1
3. Bl'ksm's h'lp'r	7	1	1	1	1	1	1	1	1	1	1
4. Bookkeeper	34	6	8	3	4	3	1	4	1	1	2
5. Brewer	3	1	1	1	1	1	1	1	1	1	1
6. Butcher	3	1	1	2	1	1	1	1	1	1	1
7. Carpenter	24	3	1	7	6	1	3	1	3	2	3
8. Cigarmaker	4	1	1	1	1	1	1	1	1	1	1
9. Clerk	35	9	5	4	2	1	1	1	1	1	1
10. Coachman	3	2	1	1	1	3	1	1	1	1	1
11. Cook	11	18	14	5	3	7	1	3	1	1	2
12. Domestic	46	22	21	8	7	8	3	1	1	1	1
13. Engineer	15	3	11	8	1	4	2	1	3	1	3
14. Factory hand.	69	12	13	8	12	13	7	2	1	1	2
15. Farm hand....	14	5	5	4	2	1	3	2	1	1	1
16. Fireman	7	6	8	1	5	2	1	1	1	1	1
17. Hotel worker.	2	4	5	2	1	2	1	1	1	1	1
18. Janitor	1	1	1	1	1	1	1	1	1	1	1
19. Laborer	311	888	467	170	127	89	36	18	10	8	6
20. Machinist	17	5	5	4	1	1	1	2	1	1	1
21. Messenger boy	6	1	1	1	1	1	1	1	1	1	1
22. Moulder	8	1	5	2	1	2	3	2	1	1	1
23. Painter	15	7	3	4	2	7	4	3	2	1	1
24. Porter	7	1	1	1	1	2	1	1	1	1	1
25. Printer	7	1	1	1	1	1	1	1	1	1	1
26. Railroad h'ds.	10	1	1	1	1	1	1	1	1	1	1
27. Sailor	1	3	6	2	1	2	1	1	2	1	1
28. Salesman	9	3	2	1	1	1	1	1	1	1	2
29. Steam fitter	2	1	3	2	1	1	2	1	1	1	1
30. Stenographer	7	1	1	1	1	2	1	1	1	1	1
31. Student	9	1	1	1	1	1	1	1	1	1	1
32. Tailor	2	2	2	2	1	1	1	1	2	1	1
33. Tanner	6	1	1	1	1	1	2	2	1	1	1
34. Teacher	6	1	2	1	1	1	1	1	1	1	1
35. Teamster	19	7	2	4	2	4	2	1	2	2	1
36. Walter	5	1	1	1	1	2	1	1	1	1	1
37. Miscellaneous	28	7	7	3	7	7	3	4	1	2	3
38. Miscellaneous	92	25	26	18	17	11	2	3	1	1	2
39. Miscellaneous	13	5	8	2	1	4	1	1	1	1	1
40. Miscellaneous	18	3	2	2	4	1	2	1	1	1	1
41. Miscellaneous	30	8	10	8	6	6	3	1	1	1	1
Totals	911	1,064	654	286	216	185	88	50	32	24	32

NUMBER OF CHILDREN TO EACH FAMILY.

Table VIII.

Occupation.	Number married.	1 child.	2 children.	3 children.	4 children.	5 children.	6 children.	7 children.	Over 7 children.	No children.
1. Baker	3			1	1					1
2. Blacksmith	8	1	2		1		2			
3. Blacksmith's helper	3			1		1				1
4. Bookkeeper	21	3	4	2	4			7	1	
5. Brewer										
6. Butcher	3	2								1
7. Carpenter	34	8	7	4	2	4	4	4	1	
8. Cigarmaker	4	1			1					1
9. Clerk	18	5	2	4			2		1	4
10. Coachman	4	1	2							1
11. Cook	26	16	7				1			2
12. Domestic	13	13								
13. Engineer	37	8	3	12	4	6	2		1	1
14. Factory hand	37	10	7	3	5					12
15. Farm hand	9	2	2	3	1					1
16. Fireman	8	2	1		2				1	2
17. Hotel worker	2		1	1						
18. Janitor	5		1			1			2	1
19. Laborer	281	62	50	39	20	19	16	2	4	69
20. Machinist	13	3	1		5					4
21. Messenger boy										
22. Moulder	7	3	1		1					2
23. Painter	18	5	3		2					8
24. Porter	3	1					1			1
25. Printer	1									1
26. Railroad hand	5	1	1							3
27. Sailor	7			1				1	1	
28. Salesman	9	3	1			1	2			4
29. Steam fitter	2	1			1					2
30. Stenographer	1			1						
31. Student										
32. Tallor	5	2	2		1					
33. Tanner	4		3							1
34. Teacher	4	1	1							2
35. Teamster	14	1		3	2	1	2	1		4
36. Walter	2									2
37. Miscellaneous	32	8	8	4	2	2	1		1	4
38. Miscellaneous	46	12	10	4	3	4		1		12
39. Miscellaneous	14	4	2	4	2					2
40. Miscellaneous	11	3	2	1	3					2
41. Miscellaneous	21	2	5	4	2	2			1	5
Totals	735	183	130	94	65	41	34	18	14	156

NUMBER OF OTHER PERSONS THAN CHILDREN TO SUPPORT.

Table IX.

Occupation.	Number married.	1 person.	2 persons.	3 persons.	4 persons.	Over 4 persons.	None besides children.
1. Baker	3		2				1
2. Blacksmith	8	7					1
3. Blacksmith's helper	3	3					
4. Bookkeeper	21	14	7				
5. Brewer							
6. Butcher	3	1					2
7. Carpenter	34	24		1			9
8. Cigarmaker	4		1			1	2
9. Clerks	18	13	4				1
10. Coachman	4	1					3
11. Cook	26	16	7				3
12. Domestic	13	3	3				7
13. Engineer	37	23	3				12
14. Factory hand	37	25	10		2		
15. Farm hand	9	2					7
16. Fireman	8	8					
17. Hotel worker	2	1	1				
18. Janitor	5	2					3
19. Laborer	281	193	17	1	2		68
20. Machinist	13	10	2				1
21. Messenger boy							
22. Moulder	7	5	2				
23. Painter	18	12	3	3			
24. Porter	3	3					
25. Printer	1			1			
26. Railroad hand	5	1	1				3
27. Sailor	7	2					5
28. Salesman	9	9					
29. Steam fitter	2	1	1				
30. Stenographer	1		1				
31. Student							
32. Tailor	5	2	1				2
33. Tanner	4		3	1			
34. Teacher	4	1		1			2
35. Teamster	14	7	2				5
36. Walter	2	2					
37. Miscellaneous	32	23	5	2			2
38. Miscellaneous	46	32	12			2	
39. Miscellaneous	14	8	1		1		4
40. Miscellaneous	11	8	3				
41. Miscellaneous	21	15	2				4
Totals	735	476	94	10	5	3	147

CLASSIFIED WEEKLY EARNINGS, WHERE LAST EMPLOYED, OF PERSONS WHO APPLIED FOR EMPLOYMENT.

Table X.

Occupation.	Number reporting.	Under \$3.00.	\$3.00 but under \$4.	\$4.00 but under \$5.	\$5.00 but under \$6.	\$6.00 but under \$7.	\$7.00 but under \$8.	\$8.00 but under \$9.	\$9.00 but under \$10.	\$10.00 but under \$12.	\$12.00 but under \$15.	\$15.00 but under \$20.	\$20.00 and over.	No answer.
1. Baker	3											1		3
2. Blacksmith	14								6			4	1	
3. Blacksmith's helper			1											
4. Bookkeeper	5		5	4	5									13
5. Brewer	5		5	4										1
6. Butcher	6		2						2		1			1
7. Carpenter	5		2	2					1	2	1			3
8. Cigar-maker	3	1										1		1
9. Clerk	9	4	5	4										
10. Coachman	1	1	1	1		1		1	1	1				1
11. Cook	76	5	4	6	4	2		2	16	5	15	2		15
12. Domestic	152	3	3	4				1						61
13. Engineer	158			1					2	15	11			15
14. Factory hand	147	11	12	15	4			15	15	17	1			22
15. Farm hand	44	5		5				2	1	2	2			11
16. Fireman	21			1	1	2		5	11	3	1	1		6
17. Hotel worker	18		6		1	1		1						2
18. Janitor	3	1			1			1						1
19. Laborer	2,397	15	13	25	125	58	26	58	58	64	165	5	33	
20. Machinist	47		1	1		2	6	8	10	9				3
21. Messenger boy	5	5	1	2										
22. Moulder	23	1	2			2			1	5	3			2
23. Painter	14		1		5	4					13			14
24. Porter	12	4	2	1	1		1	1			1			1
25. Printer	8	2	1	2	1				2					
26. Railroad hand	10			1					6		3			
27. Sailor	19	1			1	1	6	4	2		12	1	1	
28. Salesman	21	1		1	1	2		2	4			1	6	
29. Steamfitter	11		4			1	2					1	1	
30. Stenographer	10			1	2				1	1	1		4	
31. Student	11		1	3										
32. Tailor	9					1			1					5
33. Tanner	16			1	2	1	2	3	1					5
34. Teacher	11					1		1						
35. Teamster	45	2	1	4	6	2	7	8	6					
36. Walter	11	3	1		1						2			2
37. Miscellaneous	79	3	3	7	19			11	12	7	9	1	15	
38. Miscellaneous	278	18	19	18	16	12	36	51	17	5	2		85	
39. Miscellaneous	47	2	1	1	1	7	16	5	5				9	
40. Miscellaneous	22	3	4	2	1	1	2	5	3	1			5	
41. Miscellaneous	77	15	16	2	5		5	4	6	11	1	17		
Totals	3,891	223	114	156	322	113	431	695	757	317	28	762		

TIME OUT OF EMPLOYMENT AND TIME IN THE EMPLOY OF LAST
LAST EMPLOYER.

Table XI.

OCCUPATION.	Number reporting.	TIME OUT OF EMPLOYMENT.						TIME WITH LAST EMPLOYER.				
		Less than 1 month.	1-6 months.	7-12 months.	1-5 years.	Over 5 years.	No answer.	Less than 1 year.	1-5 years.	6-10 years.	Over 10 years.	No answer.
1. Baker	10	7	2				1	7	1			2
2. Blacksmith	21	15	4				2	11	4	3		3
3. Blacksmith's helper	10	7	1				2	6	2			2
4. Bookkeeper	65	28	13	2	2	1	14	24	24	2	4	11
5. Brewer	8	6	1				1	6	1			1
6. Butcher	8	5	2				1	4	3			1
7. Carpenter	58	32	11	2	1		12	37	6	3		12
8. Cigarmaker	9	6	2				1	3	3	3		3
9. Clerk	60	21	23	4	1		11	30	15	3	1	11
10. Coachman	10	6	1				3	5	3	1		1
11. Cook	76	44	10	1			21	57	6			13
12. Domestic	162	63	21	4			74	85	9	1	1	66
13. Engineer	58	21	11	2	1		23	30	11		2	15
14. Factory hand	147	70	49	3	4		21	83	38	4	7	15
15. Farm hand	44	23	8				13	22	8		1	13
16. Fireman	31	19	2	1			9	18	5			8
17. Hotel worker	18	12	3				3	12	4			2
18. Janitor	8	1	3	1			3	2	2		2	2
19. Laborer	2,269	1,661	86	4	2		507	990	56	23	5	1,186
20. Machinist	40	18	18				4	25	9	4		4
21. Messenger boy	8	7					1	5	2			1
22. Moulder	23	17	6				1	16	7			
23. Painter	54	42	7				5	31	10	2		11
24. Porter	12	8	3				1	10	2			
25. Printer	8	5	3					4	3			1
26. Railroad hand	10	4	3				3	8	2			
27. Sailor	19	13	5				1	17	1			1
28. Salesman	21	7	7	2	1		4	6	9	2		4
29. Steamfitter	11	5	4				2	8	2	1		
30. Stenographer	10	1	5				4	3	3			4
31. Student	11	3	1				7	5				6
32. Tailor	9	4	3				2	3	3		1	2
33. Tanner	16	11					5	4	7	1		4
34. Teacher	11	2	3	1	1		4	4	2	1		3
35. Teamster	45	36			2		7	29	4	3	1	8
36. Waiter	11	5	2				4	7	1			3
37. Miscellaneous	79	48	16	3	2		10	42	18	4	1	14
38. Miscellaneous	278	127	57	3	3		88	137	46	3	1	91
39. Miscellaneous	42	24	9	1			8	23	11			8
40. Miscellaneous	32	13	7	3	1		8	15	9	2	1	5
41. Miscellaneous	77	47	12	2	2		14	47	11	3	1	15
Total	3,890	2,494	429	39	23	1	904	1,879	364	66	29	1,552

ANALYSIS.

In the preceding tables are thus presented a great many facts that relate to the condition of a large proportion of those who, during the last six months of 1901, sought employment through the State Free Employment offices in Milwaukee and Superior. The actual number of persons included in these tables, or from whom more or less complete data were obtained, was 3,890. As these facts are of considerable importance it was thought proper they should be explained more fully and hence the following brief analysis of the same is included.

In this analysis the first presentation in order will be the one which relates to the place of residence of the applicants. It is interesting to know whether the applicants lived in, or elsewhere than in the cities where the offices are located :

Place of residence.	Number.	Per cent.
In city	2,300	59.25
Outside of city	1,582	40.75
Total	3,882	100.00

The total number of persons included in the investigation was 3,890. The total number who reported as to whether they lived in the places where the offices are located was 3,882, or practically entire number included. The above table shows that of those who thus reported as to place of residence 2,300, or 59.25 per cent., lived in the place where the application was made, and that 1,582 persons, or 40.75 per cent., lived elsewhere than in these places.

The figures in the above table have been taken from the totals in table I, the table which shows the place of residence by occupation. Those who may desire to obtain the facts in detail for each occupation can do so by examining that table :

Citizenship.	Number.	Per cent.
Native born	2,481	63.78
Naturalized	1,035	26.60
Not naturalized	374	9.62
Total	3,890	100.00

From this presentation, the second in order and which has also been compiled from table I, it appears that all the applicants reported as to their citizenship. From these reports it is seen that 2,481 persons, or 63.78 per cent. of the whole, were native born; that 1,035, or 26.60 per cent., were naturalized citizens; and that 374, or 9.62 per cent., were not naturalized. Almost 64 per cent. were thus native born, as against nearly 36 per cent. foreign born, and of the foreign born about 15 per cent. had failed to become naturalized. These figures represent, of course, the total number included. The proportion in each occupation may be readily obtained by examining the original table.

Married or single.	Number.	Per cent.
Married	735	20.13
Single	2,912	79.87
Total	3,647	100.00

The preceding presentation gives the number, respectively, of those who were married and of those who were single. Of the 3,647 persons who reported upon these points it appears that 735, or 20.13 per cent., were married and that 2,912, or 79.87 per cent., were single. In this case there were 243 persons who did not report as requested. The figures in the above presentation, as in the two which precede it, were taken from table I in the foregoing series in this portion.

Table II deals with the place where the applicants were employed last, the place where born, and the kind of work desired. The totals in each case are as follows:

Where last employed.	Number.	Per cent.
In city	1,343	43.32
Outside of city	1,757	56.68
Total	3,100	100.00

From this presentation it appears that 3,100 persons reported as to the place where they were last employed. Of these 1,343 persons, or 43.32 per cent., had been last employed in the city,

while 1,757, or 56.68 per cent., had been employed elsewhere than in the city. As all but 1,582 persons regarded the city as their place of residence, it is evident that many had been employed away from their home.

Place of birth.	Number.	Per cent.
Wisconsin	1,023	26.30
Other U. S.	1,458	37.48
Other countries	1,409	36.22
Total	3,890	100.00

This table shows the place of birth. We find in it that 1,023, or 26.30 per cent., of the applicants were born in Wisconsin; that 1,458, or 37.48 per cent., were born in other United States states, and that 1,409, or 36.22 per cent., were born in other countries. Of the total persons included, 2,481 were thus native born, while 1,409, or 36.22 per cent., were born elsewhere than in the United States. These figures agree substantially with those in the table on citizenship.

Kind of Work Desired.—Efforts were made to ascertain from the answers what proportion of the applicants desired employment at what they reported as their trade or occupation and what proportion in some other line, that is, in a new trade or occupation. The results of this are as follows:

Kind of employment.	Number.	Per cent.
At their trade	3,278	87.26
Other occupation	490	12.74
Total	3,768	100.00

All but 122 of the applicants replied directly or indirectly to this question. Of those who answered, 3,278 persons, or 87.26 per cent., sought employment at work which they regarded as their trade, or to which they had become accustomed. Those who gave common labor as their occupation could not be satisfactorily classified in all cases. Hence, in doubtful instances, it was assumed they sought employment at some sort of work that could be classed as common labor.

The data in table III relates to whether member of labor or

trade union, and willing to accept employment elsewhere than in the city. The causes of leaving last employer are also given.

Member of labor union.	Number.	Per cent.
Not a member	3,068	95.92
Member	130	4.08
Total	3,198	100.00

From this it seems that 3,068 of the applicants, or 95.92 per cent., were not members of labor unions of any kind, and that 130, or 4.08 per cent., were members of some sort of a union. Absolute reliance should not be placed in these figures, as there are reasons to believe that the answers on these points were, at least in some cases, misleading.

Willing to accept employment.	Number.	Per cent.
Elsewhere than in city	2,676	77.86
Only in city	761	22.14
Total	3,437	100.00

This presentation shows that 2,676, or 77.86 per cent., of the persons reporting in this respect were willing to accept employment outside of the city, or in other words, away from their home, and that 761, or 22.14 per cent., were not willing to go away from home for employment. Almost all of those who were glad to take employment away from home were single, or without family. Many, while they looked upon the city as their place of residence, were almost constantly employed elsewhere. In fact, they only came into the city when off for a rest or when looking for another job.

Desired change.	Number.	Per cent.
Desired change	368	15.18
Work completed	472	15.35
Sickness	211	8.70
Other causes	1,373	60.77
Total	2,421	100.00

In this presentation it is shown that 368 persons, or 15.18 per cent., left their last employer simply because they desired a change; that 472, or 15.35 per cent., left their last place because their work was completed; that 211, or 8.70 per cent., left their work because of sickness; and that 1,373 persons, or 60.77 per cent., left for some other cause which is not specified here. The reason why so many of the causes for leaving their place were not specified in detail is simply this, that they were too numerous to be given in detail. They varied from a disagreement of some kind to a discharge for incompetency.

Good health.	Number.	Per cent.
Good health	3,495	97.63
Fairly good health	71	1.98
Poor health	14	.39
Total	3,580	100.00

The condition of the applicants as to their health was quite fully reported. In most cases they reported their health as good. In fact those who so reported numbered 3,495, or 97.63 per cent., of the whole number answering this question. About two per cent. said that their health was fairly good, while only 14 were in poor health. This is a good showing. In fact, it points to a condition in this respect that is certainly encouraging. Those in poor health were not as a rule found in any particular occupation, as is found from the fact that in table IV they are fairly well distributed among the different classes.

Read and write.	Number.	Per cent.
Can read and write	3,404	97.24
Cannot read and write	107	2.76
Total	3,511	100.00

In table IV is further seen what proportion could read and write. Those who possessed these accomplishments numbered 3,404, or 97.24 per cent., of those reporting regarding it. Those who could not read and write were comparatively few in number, being only 107, or 2.76 per cent. About the figures given

here there can be no mistake as the applicants were actually put to the test by being requested to fill out the application blank.

References.	Number.	Per cent.
References	2,134	74.98
No references	712	25.02
Total	2,846	100.00

The third class of information given in table IV relates to references. In this connection we find that 2,134 persons either had or could produce references from former employers, and that 712 persons did not have any such references, while 1,044 did not reply at all to this question. The proportion who would not answer this question is thus quite large. The reasons for not answering were not given, but the chances are that the omission is more often due to the fact that they had no references at all, than to any other cause. References are seldom obtained, either in the trades or by those engaged at common labor.

Age.	Number.	Per cent.
15 years of age and under	28	0.79
16-20 years of age	608	17.28
21-25 years of age	865	24.57
26-30 years of age	600	17.06
31-35 years of age	443	12.59
36-40 years of age	359	10.20
41-45 years of age	257	7.33
46-50 years of age	166	4.71
51-55 years of age	62	3.72
Over 55 years	131	3.72
Total	3,519	100.00

Table V is devoted to the age of those who applied for employment. The ages reported were naturally so varied that they could not be given in detail. For this reason they were classified into five year periods. The table therefore shows by occupations the number who were 15 years or under, the number between 16 and 21 years, and so on until the 55 year, when all above this age are included in one class.

From this table as summarized above it is seen that only 28 persons were under 15 years of age, and that 131 persons, or

3.72 per cent. of the total reporting were 55 years of age. These are the two extreme figures. Between them there are eight classes each covering a period of five years. The number in each of these classes vary from 62 persons in that for those who were between 51 and 55 years, to 865 persons which is the number in the class 21 to 25 years of age. This class thus includes the greatest number of persons.

Taking the summary as a whole, we find that it includes 3,519 persons, of whom 2,101 were 30 years of age or under, and 2,544 were 35 years of age or less. About 73 per cent. were thus under 35 years of age while 27 per cent. were past this limit.

YEARS IN THIS COUNTRY.

Time.	Number.	Per cent.
Less than 1 year	88	6.25
1 to 5 years inclusive	212	15.04
6 to 10 years inclusive	250	17.74
11 to 15 years inclusive	248	17.62
16 to 20 years inclusive	259	18.38
21 to 25 years inclusive	144	10.22
26 to 30 years inclusive	79	5.60
31 to 35 years inclusive	60	4.25
36 to 40 years inclusive	31	2.20
Over 40 years	38	2.70
Total	1,409	100.00

The preceding is a presentation of table VI. It shows the classified years in this country of those who had been born in some other country together with the per cent. of the number in each class.

In this presentation we find first that 88 applicants or 6.25 per cent. of those born elsewhere had been in this country less than one year; that 212 or 15.04 per cent. had been here from 1 to 5 years; that 250 or 17.74 per cent. had been here from 6 to 10 years; that 248 or 17.62 per cent. had been here from 11 to 16 years; that 259 persons, or 18.38 per cent. had made this country their home from 16 to 20 years. This embraces five of the classes and includes 1,047 of the applicants, or about three-fourths of the total number included. But continuing down the table we find further that 144 persons, or 10.22 per cent. had from 21 to 25 years residence here to their credit; that 79 or 5.60 per cent. counted their time at from 26 to 30

years; that 60 or 4.25 per cent. had been here from 31 to 35 years; that 31, or about 2 per cent. were residents of a standing varying from 36 to 40 years; and 38, or 2.70 per cent. had been in this country over 40 years.

The total number born elsewhere was as explained already 1,409 persons, which number constitute about 38.79 per cent. of the total number included in this investigation.

YEARS IN WISCONSIN.

Time.	Number.	Per cent.
Since birth	911	25.74
Less than 1 year	1,064	30.14
1 to 5 years inclusive	654	18.24
6 to 10 years inclusive	286	8.17
11 to 15 years inclusive	216	6.09
16 to 20 years inclusive	185	5.23
21 to 25 years inclusive	88	2.49
26 to 30 years inclusive	50	1.42
31 to 35 years inclusive	32	.90
36 to 40 years inclusive	24	.68
Over 40 years	32	.90
Total	3,542	100.00

Table VII deals with the time the applicants had resided in this state. It gives these fact by industries and on the whole makes up a rather interesting exhibit.

The time in this state has been classified and the first class in order is that for those who had been since birth. The number in this class is 911, or 25.74 per cent cent of those who reported regarding it. It will be noticed that this figure varies some from that in table II which shows the number born in this state. This difference is undoubtedly accounted for by the fact that there were applicants who while born in this state, had lived in some other state during shorter or longer periods, and therefore could not report that they had lived here since birth. The second class in order includes those who had lived in the state less than 1 year, and this class is the largest of all including 1,064 persons, or 30.14 per cent. of the whole number reporting. The next class includes those who had lived here from 1 to 5 years. Here we find 654 persons, or 18.24 per cent of the total. From this on beginning with the fourth class the presentation shows that 268 or 8.17 per cent. had lived in the state from 6 to 10 years; that 216 or 6.09 per cent are

in the class 11 to 15 years; that 185 persons or 5.23 per cent. were found in the class 16 to 20 years. The classes thus mentioned thus include all who had resided in the state 20 years and less than this time, while the remaining classes give those who had lived more than 20 years. Beginning thus with the seventh class we find that this class includes 88 persons, or 2.49 per cent of the whole; that 50, or 1.42 per cent. had resided here from 26 to 30 years; that 32 persons were in the class 31 to 35 years; that 24 persons were in the class 36 to 40 years; and that 32 persons, or .90 per cent. had made Wisconsin their home for over 40 years.

In considering the figures from another point of view it is found that 2,915 persons, or 82.29 per cent. had lived in the state from one day to 10 years; that 3,316 persons had lived here from one day to 20 years inclusive; while 226 persons, or 6.39 per cent. had had this state as a home more than 20 years.

The total number reporting in this respect is, as seen, 3,542 persons.

Table VIII in this series shows, by occupation or trades, the number who were married, and the number of children to each family. From the totals in this table the following exhibit is made up.

Children.	Number.	Per cent.
Families with 1 child each	183	31.61
Families with 2 children each	130	22.46
Families with 3 children each	94	16.24
Families with 4 children each	65	11.23
Families with 5 children each	41	7.08
Families with 6 children each	34	5.87
Families with 7 children each	18	3.11
Families with over 7 children each	14	2.40
Total with children	579	100.00
Families with no children	156	
Total families	735	

The whole number of families was 735. Of these 579 or 78.8 per cent. had children, and 156, or 21.2 per cent. had no children.

Of the whole number who were married 579 thus had children to bring up. In classifying the families according to the number of children it appears from the above presentation that

183 families, or 31.61 per cent. had one child each; that 130 families or 22.46 per cent. had two children each; that 94 families had three children each; that 65 families each had four children; that 41 families each had five children; that 34 families each had six children; that 18 families each had seven children; and that 14 families had more than seven children each. This table as a whole furnishes some interesting material for study and comparisons.

Table IX shows the number of other persons than children, such as parents and other relatives who were supported by the 735 families in question. The totals in this table are given in the following exhibit.

Persons supported.	Number.	Per cent.
1 person	476	80.95
2 persons	94	16.00
3 persons	10	1.70
4 persons	5	.85
More than 4 persons	3	.50
Families having other persons besides children to support	588	100.00
Families with only children to support	147	
Total families	735	

From this we find that 588 families, or 71 per cent. of the total had other persons, or relatives besides their own children to support. Of these 476 families, or 80.95 per cent had one person each to support while 112 families had 2 or more persons each for whose support they were responsible.

The tenth table in the series deals with earnings. It gives by occupations the classified weekly earnings received from the last employer. The figures are summarized as follows:

Classified weekly earnings.	Number.	Per cent.
Under \$5.00	226	7.22
\$5 but under \$6	114	3.64
\$6 but under \$7	156	4.99
\$7 but under \$8	323	10.32
\$8 but under \$9	113	3.63
\$9 but under \$10	401	12.82
\$10 but under \$12	685	22.22
\$12 but under \$15	757	24.20
\$15 but under \$20	317	10.13
\$20 and over	26	.83
Total reporting	3,128	100.00
Not reporting	762	.....
Total	3,890	.....

From the foregoing presentation we find that of the 3,890 persons investigated, 3128 reported as to earnings. Further it is seen that of those thus reported 226 persons, or 7.22 per cent. of the whole number reporting received less than \$5.00 per week; that 114, or 3.64 per cent received \$5.00 but under \$6.00 per week; that 156 received \$6.00 but under \$7.00. This brings us down to the fourth class in order that of \$7.00 but under \$8.00 which includes 323 persons, or 10.32 per cent. of the whole number. This class embraces those who received \$1.25 per day. Continuing down the list it is found that the class \$8.00 but under \$9.00 includes 113 persons, and that the class \$9.00 but under \$10.00 includes 401 persons, or 12.82 per cent of the total. This latter class comprises those who are paid at the rate of \$1.50 per day. In the balance of the table we see that 695 persons, or 22.22 per cent. received \$10.00 but under \$12.00; that 757 received \$12.00 but under \$15.00; that 317 persons received \$15.00 but under \$20.00 per week; while 26 persons or .83 per cent received \$20.00 per week or over.

The class which includes the greatest number of persons is that of \$12.00, but under \$15.00. The next class in this order of importance is that of \$10.00, but under \$12.00; while the third in order of importance is \$9.00, but under \$10.00 per week.

In looking over table IX it will be noticed that a great variety of occupations are included, occupations in which the earnings are derived from all possible sources. Thus there are the skilled trades and common laborer and many other callings, on the one hand, where the earnings usually are received in cash only. On the other hand there are women in the domestic service, farm hands and others whose wages consist not of cash alone, but of board and lodging. Then again there are porters and waiters whose earnings are made up in various ways. As the foregoing presentation includes all of the occupations in the table without reference to their duties or manner of payment, it must follow, as matter of course, that the figures there can not be safely compared with any other figures of earnings than such as cover the same field and have been obtained and com-

pleted in the same manner. This should be borne in mind. Those who desire material for comparison for individual occupations, however, can readily obtain it from table IX, where the figures for each are given in detail.

The two presentations which follow are made up with reference to showing the run of the earnings of those who do common labor and of those employed in the various skilled trades.

The following presentation includes those who gave common labor and factory work as their occupation as compiled from table IX:

CLASSIFICATION.	COMMON LABORER.		FACTORY HANDS.	
	Number.	Per cent.	Number.	Per cent.
Under \$5	18	.96	11	8.87
\$5 but under \$6	13	.70	9	7.26
\$6 but under \$7	69	3.69	6	4.84
\$7 but under \$8	215	11.52	15	12.10
\$8 but under \$9	59	3.16	4	3.22
\$9 but under \$10	208	11.14	35	28.22
\$10 but under \$12	508	27.22	15	12.10
\$12 but under \$15	604	32.35	17	13.71
\$15 but under \$20	165	8.83	10	8.07
\$20 and over	8	.43	2	1.61
Total reporting	1,867	100.00	124	100.00
Not reporting	393		23	
Total	2,260		147	

Here we find the classified earnings of 1,876 common laborers and of 124 skilled workers. For the common laborers it is found that 18 of them, or .96 per cent. of the total number reporting, received less than \$5.00 per week. This is a comparatively small proportion, and one that is not greatly increased until in the class \$7.00, but under \$8.00, which includes 215 persons, or 11.52 per cent. The next class in order has a very small per cent. of the total, but the class \$9.00, but under \$10.00, includes by far the greater proportion of the whole number. From the figures as a whole it clearly appears that \$1.25, \$1.50, \$1.75 and \$2.00 were the ruling rates of wages for those who gave common labor as their occupation.

The following includes carpenters, machinists, upholsterers, millers, electricians, wagonmakers, masons, harnessmakers,

coopers, plumbers, book binders, shoemakers, roofers, tanners, foundrymen, in about the same proportion.

SKILLED TRADES.

Classified weekly earnings.	Number.	Per cent.
Under \$5	2	1.60
\$5 but under \$6	2	1.60
\$6 but under \$7	4	3.20
\$7 but under \$8	4	3.20
\$8 but under \$9	5	4.00
\$9 but under \$10	23	18.40
\$10 but under \$12	16	12.80
\$12 but under \$15	32	25.60
\$15 but under \$20	37	29.60
\$20 and over		
Number reporting	125	100.00
Not reporting	15	

In examining the above presentation many rather interesting features present themselves. Thus we find first that a comparatively small proportion of the whole received less than \$1.50 per day. In fact, the classes below \$9.00, but under \$10.00, include only 17 persons, or 13.60 per cent. of the number reporting. Those who are embraced in these classes were evidently only helpers or apprentices, as the wages of any competent workman in these trades were considerably above that given. The remaining classes beginning with \$9.00, but under \$10.00, show proportionately a very large number. This is substantiated by the fact that they include 108 of the 125 persons, or 86.40 per cent. of the same. The largest number is found in the class \$15.00, but under \$20.00; but this is closely approached by the class which precedes it, the one of \$12.00, but under \$15.00, per week.

Table XI, the last in the series, deals with the time out of employment, and the time with the last employer. The totals in the former case are as follows:

Time.	Number.	Per cent.
Less than 1 month	2,494	83.53
From 1 to 6 months	429	14.37
From 7 to 12 months	39	1.30
From 1 to 5 years	23	.77
Over 5 years	1	.03
Total reporting	2,986	100.00
Total not reporting	904	.....
Total included	3,890	.....

From this it appears that 2,986 persons out of the 3,890 included, reported as to the time they had been out of employment. Of this number 2,494, or 83.53 per cent. of the total number reporting, had been out of work less than one month, and 429, or 14.37 per cent., from 1 to 6 months. Of the remaining number 39 had been out of work from 7 to 12 months, and 23 had not had employment for periods varying from 1 to 5 years, while only one had been out of work more than five years.

The following exhibit deals with the time the applicants had remained in the employ of their last employer.

Time.	Number.	Per cent.
Less than 1 year	1,879	80.36
From 1 to 5 years	364	15.57
From 6 to 10 years	66	2.82
Over 10 years	29	1.25
Total reporting	2,338	100.00
Total not reporting	1,552	.....
Total included	3,890	.....

It is seen from these figures that 1,879 persons, or 80.36 per cent. of the number reporting upon it, remained with their last employer less than one year, in most cases a few weeks only; that 364, or 15.57 per cent., had been in their last place from 1 to 5 years, that 66 had a record in this respect of from 6 to 10 years, and 29 of over 10 years.

This presentation contains many rather singular features. To many it will certainly be a surprise to learn that over 80 per cent. had remained less than one year with their last employer. This time certainly seems very short. What can possibly be the causes of it? Was it due to shiftlessness or to some-

thing else that can be attributed to the employes, or is it due to the character of the employment, or something about the employers? These are questions that certainly are difficult to answer. Perhaps table III offers a few explanations. In that table it was pointed out that in 472 cases the employes left because the job was completed; that 368 persons quit because they desired a change; and that 1,373 had left for various other reasons which, while not given in detail, were mostly of a personal character. These facts of themselves are not much of an explanation, but they throw a great deal of light upon the circumstances surrounding the employment in the various occupations.

PART VIII.

Employment and Earnings in Wholesale and Retail Mercantile Establishments—In Six Skilled Industries—Official Salaries in Cities, etc.—Labor Organizations.

Under the above head is presented in the following pages a compilation of the reports of 74 wholesale mercantile establishments in this state. These reports include all persons, except superintendents, managers and partners who were employed by the establishments reporting, and relate to the classified weekly earnings, the number employed by months, the hours of labor daily, the mode and time of paying wages. The figures giving the number employed by months cover the entire year of 1900 and the first six months of 1901. The facts as to earnings are those for the week in 1901 during which the greatest number were employed. The facts relating to hours of labor and modes and time of payment of salaries and wages are those for 1901 or those which prevailed at the time of reporting in July of that year. The schedules calling for these facts were sent out to the employers and were by them filled out and returned.

The data thus obtained was classified and compiled with reference to the line of business covered by the reports. In the following table is found the number of establishments in each class and the number of persons employed.

CLASSIFICATIONS OF INDUSTRIES.	1900		1901	
	Number establishments.	Number employed.	Number establishments.	Number employed.
Drugs	5	140	5	143
Dry goods	5	866	5	923
Groceries	14	253	14	251
Hardware	5	156	5	164
Miscellaneous	46	974	46	1,040
Total	75	2,389	75	2,521

Of the establishments thus included in this investigation 5 were engaged in the Wholesale Drug business, 5 in Dry Goods, 14 in Groceries, 5 in Hardware, and 46 in various other lines of business that have been grouped together under the head of Miscellaneous.

These 75 establishments together employed 2,389 persons in 1900 and 2,521 persons in 1901.

The first presentation in order relates to the classified weekly earnings and consists of six tables. The first of these shows the actual number of male persons who received classified weekly earnings. The second in order shows the actual number of females who received classified weekly earnings. The third table shows the total number of both males and females who received classified weekly earnings.

The fourth, fifth, and sixth tables in order relate to percentages. They show for the male, female, and total of both, respectively, the per cent. of the number in each class of the total persons employed.

All of the five industries are included in each of these tables. The classifications of earnings run from "under \$5.00 per week" up to "\$20.00 per week and over." That is, the classes are so arranged that the first in order will show all who received under \$5.00, the second all who received \$5.00 per week but less than \$6.00 and so on up to the last class which gives all who received \$20.00 and over per week.

The three tables which give the actual number of males, females and total are next in order.

TOTAL MALE PERSONS RECEIVING CLASSIFIED WEEKLY EARNINGS.

Classification of weekly wages.	Drugs.	Dry goods.	Groceries.	Hard-ware.	Mis-cellan-eous.	Total.
Under \$5.00	15	143	8	4	59	229
\$5.00 but under \$6.00	5	36	4	6	35	81
6.00 but under 7.00	4	34	6	1	35	80
7.00 but under 8.00	5	18	12	10	28	71
8.00 but under 9.00	8	28	15	10	45	106
9.00 but under 10.00	9	14	27	37	65	152
10.00 but under 12.00	18	28	50	39	107	240
12.00 but under 15.00	20	42	16	21	122	221
15.00 but under 20.00	30	31	43	19	88	211
20.00 and over	21	63	72	25	123	304
Total	135	435	253	172	700	1,695
Percentage	7.96	25.66	14.93	10.15	41.30	100.00

TOTAL FEMALE PERSONS RECEIVING CLASSIFIED WEEKLY EARNINGS.

Classification of weekly wages.	Drugs.	Dry goods.	Groceries.	Hard-ware.	Mis-cellan-eous.	Total.
Under \$5.00	4	351	5	.....	234	594
\$5.00 but under \$6.00 .....	.....	63	.....	.....	92	155
6.00 but under 7.00 .....	.....	54	3	.....	32	89
7.00 but under 8.00	3	38	.....	.....	16	57
8.00 but under 9.00	1	41	4	2	21	69
9.00 but under 10.00 .....	.....	12	.....	1	14	27
10.00 but under 12.00 .....	.....	23	1	2	8	34
12.00 but under 15.00	3	24	.....	1	6	34
15.00 but under 20.00 .....	.....	30	2	.....	2	34
20.00 and over .....	.....	8	.....	.....	1	9
Total	11	644	15	6	426	1,102
Percentage	1.60	58.44	1.36	.54	38.66	100.00

TOTAL MALE AND FEMALE PERSONS RECEIVING CLASSIFIED WEEKLY EARNINGS.

Classification of weekly wages.	Drugs.	Dry goods.	Groceries.	Hard-ware.	Mis-cellan-eous.	Total
Under \$5.00	19	494	13	4	293	823
\$5.00 but under \$6.00	5	99	4	6	122	236
6.00 but under 7.00	4	88	9	1	67	169
7.00 but under 8.00	8	56	12	10	42	128
8.00 but under 9.00	9	69	19	12	66	175
9.00 but under 10.00	9	26	27	38	79	179
10.00 but under 12.00	18	49	51	41	115	274
12.00 but under 15.00	23	66	16	22	128	255
15.00 but under 20.00	30	61	45	19	90	245
20.00 and over	21	71	72	25	124	313
Total	146	1,079	268	178	1,126	2,797
Percentage	5.22	38.58	9.58	6.36	40.26	100.00

The table giving the number of male persons who received classified weekly earnings shows that the total males employed in all five industries was 1,695. It further shows that, of these, 135 persons, or 7.96 per cent. were in establishments handling Drugs; that Dry Goods employed 435 persons, or 25.66 per cent; that Groceries employed 253 persons, or 14.93 per cent.; that Hardware employed 172 persons, or 10.15 per cent.; and that Miscellaneous employed 700 persons, or 41.30 per cent.

In the table giving the number of female persons who received classified weekly earnings it is found that in the five industries 1,102 female persons were employed. Of these 11, or 1.00 per cent. were in Drugs; 644, or 58.44 per cent. in Dry-Goods; 15 or 1.36 per cent. in Groceries; 6, or .54 per cent. in Hardware; and 426 female persons, or 38.66 per cent. were employed in the Miscellaneous.

Next is the table for the totals for both male and female persons. This table shows a total for all industries of 2,797 persons. Divided among the five industries the situation is as follows: Drugs employed 146 persons or 5.22 per cent. of the total; Dry Goods employed 1,079 persons, or 38.58 per cent. of the total; Groceries employed 268 persons, or 9.58 per cent.; Hardware employed 178 persons, or 6.36 per cent.; Miscellaneous employed 1,126 persons, or 40.26 per cent. of the total.

It has thus been pointed out how many male persons, and how many female persons as well as how many of both were employed for wages in the five whole sale industries which are included. It has also been shown what per cent. relation the respective numbers bore to the total.

The three tables which are next in order show the per cent. which the number in each class in each industry, constitutes of the total for the industry.

PER CENT. OF MALES.

Classification of weekly earnings.	Drugs.	Dry goods.	Groceries.	Hardware.	Miscellaneous.	Total per cent. male.
Under \$5.00	11.11	32.87	3.16	2.33	26.02	13.51
\$5.00 but under \$6.00	3.70	8.28	1.58	3.49	10.84	4.78
6.00 but under 7.00	2.97	7.82	2.37	.58	5.95	4.72
7.00 but under 8.00	3.70	4.14	4.74	5.81	3.73	4.19
8.00 but under 9.00	5.93	6.43	5.93	5.81	5.86	6.25
9.00 but under 10.00	6.66	3.21	10.67	21.49	7.02	8.97
10.00 but under 12.00	13.33	5.98	19.76	22.68	10.21	14.16
12.00 but under 15.00	14.82	9.66	6.33	12.21	11.37	13.04
15.00 but under 20.00	22.22	7.13	17.00	11.06	7.99	12.45
20.00 and over	15.56	14.48	28.46	14.54	11.01	17.93
Percentage	100.00	100.00	100.00	100.00	100.00	100.00

PER CENT. OF FEMALES.

Classification of weekly earnings.	Drugs.	Dry goods.	Groceries.	Hardware.	Miscellaneous.	Total per cent. female.
Under \$5.00	36.37	54.50	33.33	.....	54.93	53.90
\$5.00 but under \$6.00 .....	.....	9.78	.....	.....	21.60	14.06
6.00 but under 7.00 .....	.....	3.39	20.00	.....	7.51	8.08
7.00 but under 8.00	27.27	5.90	.....	.....	3.76	5.17
8.00 but under 9.00	9.09	6.37	26.67	33.33	4.93	6.26
9.00 but under 10.00 .....	.....	1.86	.....	16.67	3.29	2.45
10.00 but under 12.00 .....	.....	3.57	6.67	33.33	1.88	3.09
12.00 but under 15.00	27.27	3.78	.....	16.67	1.41	3.09
15.00 but under 20.00 .....	.....	4.66	13.33	.....	.46	3.09
20.00 and over .....	.....	1.24	.....	.....	.23	.81
Percentage	100.00	100.00	100.00	100.00	100.00	100.00

PER CENT. OF TOTALS, OR OF BOTH MALES AND FEMALES.

Classification. of weekly earnings	Drugs.	Dry goods.	Groceries.	Hardware.	Miscellaneous.	Total. per cent. employees
Under \$5.00	13.01	45.78	4.85	2.25	26.02	29.42
\$5.00 but under \$6.00	3.42	9.18	1.49	3.37	10.83	8.44
6.00 but under 7.00	2.74	8.16	3.36	.56	5.95	6.04
7.00 but under 8.00	5.48	5.19	4.48	5.62	3.73	4.58
8.00 but under 9.00	6.16	6.29	7.09	6.74	5.86	6.26
9.00 but under 10.00	6.16	2.41	10.08	21.35	7.02	6.40
10.00 but under 12.00	12.33	4.54	19.03	23.03	10.22	9.79
12.00 but under 15.00	15.76	6.12	5.97	12.36	11.37	9.12
15.00 but under 20.00	20.55	5.65	16.79	10.67	7.99	8.76
20.00 and over	14.39	6.68	26.86	14.05	11.01	11.19
Percentage	100.00	100.00	100.00	100.00	100.00	100.00

The above three tables giving the percentages should be read in connection with the tables which precede them, or the tables which contain the actual number. Together these six tables contain not only the number of persons but the calculations which have been made upon the numbers. The tables are thus closely related. This may be further illustrated by pointing out a few facts from the last or total column in each.

In the first table in order, the table giving, by industries, the male persons employed, it is seen that 229 persons of the 1,695 persons employed received under \$5.00 per week. In the fourth table in order, the one showing the per cent. of males, it is seen that the above 229 persons constituted 13.51 per cent. of the total or of the 1,695 persons. This is one illustration only of the many that might be given, but it shows fairly well how the one table helps to explain the other.

As a whole these six tables show what the earnings were of the male and female persons who were employed in the five industries included. In the Drug business for instance it is seen that of the 135 male persons employed in it 15, or 11.11 per cent. earned less than \$5.00 per week; that of the 11 female persons who were employed here 4, or 36.37 per cent. earned less than \$5.00 per week; that of the total of both male and female or 146 persons, 19 or 13.01 per cent earned less than \$5.00 per week. This form of description could be applied to each class in each industry as well as to each class in the totals for all industries.

In Dry goods 32.87 per cent. of the males, 54.50 per cent. of the females and 45.78 per cent. of the total for both received less than \$5.00 per week.

In Groceries 3.16 per cent. of the males, 33.33 per cent. of the females and 4.85 per cent. of the total for both received less than \$5.00 per week.

In Hardware 2.33 per cent. of the males, none of the females, and 2.25 per cent of the total received less than \$5.00 per week.

In Miscellaneous 26.02 per cent. of the males, 54.93 per cent. of the females, and 26.02 per cent. of the total received less than \$5.00 per week.

Of the total for all industries 13.51 per cent. of the males,

53.90 per cent. of the females, and 29.42 per cent. of the total of both received less than \$5.00 per week.

A more satisfactory comparison of the earnings in the different industries will be found in the exhibit which follows:

MALES.

Classification of weekly wages.	Drugs.	Dry goods.	Groceries.	Hardware.	Miscellaneous.	Total.
\$12.00 and over	52.60	21.27	51.79	37.81	30.37	43.42
9.00 and over	72.59	40.46	32.22	81.98	47.60	66.55
7.00 and over	82.22	51.03	92.89	93.60	57.19	76.99
5.00 and over	88.89	67.13	96.84	97.67	73.98	86.49
Under \$5.00	11.11	32.87	3.16	2.33	26.02	13.51

FEMALES.

\$12.00 and over	27.27	9.63	13.33	16.67	2.10	6.99
9.00 and over	27.27	15.06	20.00	66.67	7.27	12.53
7.00 and over	63.63	27.33	46.67	100.00	15.96	23.96
5.00 and over .....	.....	45.50	66.67	.....	45.07	46.10
Under \$5.00	36.37	54.50	33.33	.....	54.93	53.90

TOTAL PERSONS EMPLOYED.

\$12.00 and over	50.70	18.35	49.62	37.08	30.37	29.07
9.00 and over	69.19	25.30	78.73	81.46	47.61	45.26
7.00 and over	80.83	36.88	90.30	93.82	57.20	56.10
5.00 and over	86.99	54.22	95.15	97.75	73.98	70.58
Under \$5.00	13.01	45.78	4.85	2.25	26.02	29.42

In this exhibit we find for the males, females and total persons separately, the per cent. of those who received \$12.00 per week or over this amount; the per cent. of those who received \$9.00 per week and over; the per cent. of those who received \$7.00 and over per week; the per cent. of those who received \$5.00 per week and over; and the per cent. of those who received less than \$5.00 per week.

This exhibit affords a very good comparison of the weekly earnings. From it we see that both the male and female persons received the highest earnings in Drugs, Groceries, and Hardware; and that the lowest earnings in both cases were found in Dry-goods and Miscellaneous.

Drugs had more persons who received \$12 and over per week than any other industry. When it came to those who received \$9 and over the situation had changed and the first place with 81.46 per cent. belonged to hardware, while groceries had the second place and drugs had fallen to the third. Hardware and

groceries in the order named also lead in the two classes which follow, or in the \$7 and over and \$5 and over, and it may be inferred from this that these two industries probably rank first in the vote of wages paid. They are so closely followed by drugs, however, that, while there is some variation from class to class the exact differences can hardly be pointed out.

Dry goods had the smallest proportion in the class \$12 and over, as well as in all the other classes except the last, that of under \$5 per week. This, however, is enough to show that the earnings were lower in dry goods than in miscellaneous, and that in both of these they were lower than in the three other industries.

The presentations which are next in order consist of 10 tables. The first five of these show, for each of the five industries included, the number of persons employed by months in 1900. The five tables which follow these show, for the same industries, the number of persons employed by months for the first six months in 1901. From the figures for each month, for each industry has also been computed the range of employment and unemployment.

The meaning of terms range of employment and unemployment is plain. This range was arrived at by simply regarding the number for the month during which the greatest number were employed as full employment, expressing this as 100 and then ascertaining the per cent. relation which the number for each of the other months bore to that for the highest month, and regarding the difference as the range.

DRUGS—PERSONS EMPLOYED BY MONTHS IN 1900.

Months.	Number persons.	Per cent. employed.	Per cent. unemployed.
January	133	89.26	10.74
February	135	90.60	9.40
March	138	92.62	7.38
April	138	92.62	7.38
May	138	92.62	7.38
June	137	91.95	8.05
July	139	93.29	6.71
August	138	92.62	7.38
September	143	95.97	4.03
October	149	100.00	.....
November	145	97.32	2.68
December	144	96.64	3.36
Average	140	93.96	6.04

DRY GOODS—PERSONS EMPLOYED BY MONTHS IN 1900.

Months.	Number persons.	Per cent. employed.	Per cent. unemployed.
January	724	65.70	34.30
February	756	68.60	31.40
March	816	74.05	25.95
April	926	84.03	15.97
May	889	80.67	19.33
June	874	79.31	20.69
July	819	74.32	25.68
August	691	62.70	37.30
September	851	77.22	22.78
October	930	84.39	15.61
November	1,010	91.65	8.35
December	1,102	100.00	.....
Average	866	78.58	21.42

GROCERIES—PERSONS EMPLOYED BY MONTHS IN 1900.

Months.	Number persons.	Per cent. employed.	Per cent. unemployed.
January	250	96.90	3.10
February	249	96.51	3.49
March	250	96.90	3.10
April	250	96.90	3.10
May	250	96.90	3.10
June	250	96.90	3.10
July	254	98.45	1.55
August	255	98.84	1.16
September	255	98.84	1.16
October	254	98.45	1.55
November	256	99.22	.78
December	258	100.00	.....
Average	253	98.06	1.94

HARDWARE—PERSONS EMPLOYED MONTHLY IN 1900.

Months.	Number persons.	Per cent. employed.	Per cent. unemployed.
January	154	92.22	7.78
February	152	91.02	8.98
March	148	88.62	11.38
April	161	90.42	9.58
May	155	92.81	7.19
June	155	92.81	7.19
July	155	92.81	7.19
August	154	92.22	7.78
September	159	95.21	4.79
October	167	100.00	.....
November	167	100.00	.....
December	159	95.21	4.79
Average	156	93.41	6.59

MISCELLANEOUS—PERSONS EMPLOYED MONTHLY IN 1900.

Months.	Number persons.	Per cent. employed.	Per cent. unemployed.
January	900	84.27	15.73
February	904	84.64	15.36
March	908	85.02	14.98
April	909	85.11	14.89
May	908	85.02	14.98
June	930	87.08	12.92
July	1,012	94.76	5.24
August	1,063	100.00	.....
September	1,066	99.81	.19
October	1,037	97.10	2.90
November	1,049	98.22	1.78
December	1,000	93.63	6.37
Average	974	91.20	8.80

DRUGS—PERSONS EMPLOYED BY MONTHS, 6 MONTHS OF 1901.

Months.	Number persons.	Per cent. employed.	Per cent. unemployed.
January	146	100.00	.....
February	144	98.63	1.37
March	144	98.63	1.37
April	143	97.95	2.05
May	142	97.26	2.74
June	142	97.26	2.74
Average	144	98.63	1.37

DRY GOODS—PERSONS EMPLOYED BY MONTHS, 6 MONTHS OF 1901.

Months.	Number persons.	Per cent. employed.	Per cent. unemployed.
January	824	81.50	18.50
February	793	78.44	21.56
March	915	90.50	9.50
April	1,007	99.60	.40
May	1,011	100.00	.....
June	989	97.82	2.18
Average	913	90.31	9.69

GROCERIES—PERSONS EMPLOYED BY MONTHS, 6 MONTHS OF 1901.

Months.	Number persons.	Per cent. employed.	Per cent. unemployed.
January	253	99.22	.78
February	253	99.22	.78
March	249	97.65	2.35
April	247	96.88	3.14
May	250	98.04	1.96
June	255	100.00	.....
Average	251	98.43	1.57

HARDWARE—PERSONS EMPLOYED MONTHLY, 6 MONTHS OF 1901.

Months.	Number persons.	Per cent. employed.	Per cent. unemployed.
January	164	98.20	1.80
February	161	96.41	3.59
March	160	95.81	4.19
April	167	100.00	.....
May	166	99.40	.60
June	164	98.20	1.80
Average	164	98.20	1.80

MISCELLANEOUS—PERSONS EMPLOYED MONTHLY, 6 MONTHS OF 1901.

Months.	Number persons.	Per cent. employed.	Per cent. unemployed.
January	1,023	96.69	3.31
February	1,023	96.69	3.31
March	1,036	97.92	2.08
April	1,053	99.53	.47
May	1,058	100.00	.....
June	1,048	99.05	.95
Average	1,040	98.30	1.70

The ten preceding tables relate to the number of persons employed by months and to the range of employment and unemployment, for 1900, and for the first half of 1901.

These figures are not absolute. In the first place only a certain proportion of the establishments in the state are included. Then again by full employment is not meant that all who desire

employment has secured such. By full employment is simply meant that, during that month, all who could secure employment in these lines were then employed. In other words all places were then filled. Business during this month was the heaviest for the year, and in consequence of this more help was needed. During the other months business was lighter and less hands were therefore needed. The differences between the highest and the other months simply show the proportion of the employes who for business reasons were let out. The figures in the tables show fluctuations from month to month in the number employed and are therefore interesting.

TOTAL PERSONS— RANGE OF EMPLOYMENT IN 1900.

Months.	Total number employed.	Range of employment. Per cent.	Range of unemployment. Per cent.
January	2,161	81.15	18.85
February	2,196	82.46	17.54
March	2,260	84.87	15.13
April	2,374	89.15	10.85
May	2,340	87.87	12.13
June	2,346	88.10	11.90
July	2,379	89.34	10.66
August	2,306	86.59	13.41
September	2,474	92.90	7.10
October	2,537	95.27	4.73
November	2,627	98.65	1.35
December	2,663	100.00	.....
Average	2,389	89.71	10.29

TOTAL PERSONS—RANGE OF EMPLOYMENT, 6 MONTHS OF 1901.

Months.	Total number employed.	Range of employment. Per cent.	Range of unemployment. Per cent.
January	2,410	91.74	8.26
February	2,374	90.37	9.63
March	2,504	95.32	4.68
April	2,617	99.62	.38
May	2,627	100.00	.....
June	2,598	98.90	1.10
Average	2,522	96.00	4.00

In the above two tables is compiled the total persons employed by month, by the five wholesale industries included. The first in order gives these facts for the 12 months in 1900 together with range of employment and unemployment. The second in order shows these identical facts for the first half of 1901.

Take the table for 1900 first. In this the total number employed by the five industries each month is plainly shown. The month of January shows the smallest number, or only 2,161 persons. The month of December gives the greatest number, or 2,663 persons. December therefore shows full employment, while January shows 81.15 per cent. of full employment. The range of unemployment in January was therefore 18.85 per cent. In February more persons were employed than in January. During this month therefore the range of employment was greater and that of unemployment proportionately more narrow. The same tendency as for February is seen in March and April. In May, however, there was a slight reaction causing a slightly wider range of unemployment for that month than for April. In June the tendency was again in the other direction, and continued in this course until July when the proportion of unemployed was even smaller than in April. August shows some falling off in the number employed widening the range of unemployment from 10.66 per cent. into July to 13.41 per cent. With September the busy season had set in increasing considerably the number employed and thus reducing the range of unemployment. This same tendency was felt with increasing force in each month up to the end of December when the greatest number were employed and when there was no unemployment.

The total or summary table for the first half of 1901 comes next. In this case we find the greatest number employed in May and the smallest in February. May therefore had full employment, or 100, and February the greatest range of unemployment, or 9.63 per cent. In January 8.26 per cent. were unemployed, in June 1.10 per cent. and in April .38 per cent. The range of unemployment for the first six months in 1901 was thus about the same as for the same period in 1900 though on the whole the total number employed was greater in 1901.

The average number employed was 2,389 in 1900 and 2,522 in 1901. The average range of unemployment for the whole year 1900 was 10.29 per cent., while for the six months in 1901 it was about 4.00 per cent.

The next table shows the number of establishments reporting as to the hours of labor daily in each.

NUMBER OF ESTABLISHMENTS REPORTING AS TO HOURS OF LABOR DAILY.

Classification of hours.	Drugs.	Dry goods.	Groceries.	Hardware.	Miscellaneous.	Total.
Eight hours					3	3
Nine hours	3	4	1		22	30
Ten hours	2	1	13	5	19	40
Twelve hours					2	2
Total	5	5	14	5	46	75

This table relates to the hours of labor daily. The total number of establishments reporting upon this was 75. Of these, 2 were in operation twelve hours daily; 40 were in operation ten hours daily; 30 establishments were in operation nine hours daily; 3 were in operation eight hours. These figures represent all industries included.

Taking each industry separately the same facts so far as they relate to the industry taken may be had. Thus it is found that of the 46 establishments in the miscellaneous column, 2 come in the twelve hour class, 19 in the ten, 22 in the nine, and 3 in the eight hour class.

In hardware only 5 establishments reported in this respect and all of these were in operation ten hours daily.

In groceries we find 1 establishment in operation nine hours and 13 ten hours daily.

Of the 5 dry goods establishments 4 are in the nine hour and 1 in the ten hour class.

Of the 5 drug establishments reporting, 3 were in operation nine hours and 2 ten hours daily.

This table should be read along with the one that follows giving the number and per cent. of persons who were employed at classified hours daily.

NUMBER OF PERSONS EMPLOYED AT CLASSIFIED HOURS DAILY.

Classification of hours.	Drugs.	Dry goods.	Groceries.	Hardware.	Miscellaneous.	Total.
Eight hours per day					48	48
Nine hours per day	113	976	19		623	1,736
Ten hours per day	29	13	236	164	351	793
Twelve hours per day					21	21
Total	142	989	255	164	1,048	2,598

PER CENT. OF PERSONS EMPLOYED AT CLASSIFIED HOURS OF LABOR DAILY.

Classification.	Drugs.	Dry goods.	Groceries.	Hardware.	Miscellaneous.	Total.
Eight hours					4.59	1.85
Nine hours	79.57	98.68	7.45		59.92	66.82
Ten hours	20.43	1.32	92.55	100.00	33.49	30.52
Twelve hours					2.00	.81
Total	100.00	100.00	100.00	100.00	100.00	100.00

The foregoing table which presented in two parts gives, in the first, the number of persons who were employed at classified hours daily, and, in the second, the per cent. of these persons.

The establishments reporting as to hours of labor employed as we see from the table 2,598 persons. Of these 21, or .81 per cent., were employed twelve hours daily. We see further that 783 persons, or 30.52 per cent., were employed ten hours daily; that 1,736 persons, or 66.82 per cent., were employed nine hours; and that 48, or 1.85 per cent., were employed eight hours daily. These facts apply to all of the five industries when combined.

In miscellaneous, the eight hour class includes 48 persons, or 4.59 per cent. of the 1,048 persons employed under this head. The nine hour class has 59.92 per cent. The ten hour class 33.44, and the twelve hour class 2 per cent. of the total.

In hardware all the employees came under the ten hour day.

In groceries, with a total of 255 persons, 7.45 per cent. came in the nine and 92.55 per cent. in the ten hour class.

Dry goods, with 989 employees, had 98.68 per cent. of these in the nine and 1.32 per cent. in the 10 hour class.

202. LABOR AND INDUSTRIAL STATISTICS

The following table shows the number and per cent of persons who received their wages in cash and checks, respectively, in the various industries in 1910.

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TABLE 1. BY INDUSTRY. THE NUMBER AND PER CENT OF PERSONS WHO WERE PAID MONTHLY AND WEEKLY IN 1910.

CLASSIFICATION	NUMBER			PER CENT.		
	Weekly.	Monthly.	Total.	Weekly.	Monthly.	Total.
Drugs	45	45	90	5.0	35.00	100.00
Dry goods	125	51	176	6.41	3.58	100.00
Groceries	125	4	129	28.58	9.42	100.00
Hardware	128	2	130	8.25	15.80	100.00
Miscellaneous	927	6	933	91.17	5.83	100.00
Total	2,125	274	2,399	88.58	11.42	100.00

TABLE 2. NUMBER AND PER CENT OF THOSE WHO RECEIVED THEIR WAGES IN CASH AND CHECKS, RESPECTIVELY.

INDUSTRIES.	NUMBER OF PERSONS AND HOW PAID.			PER CENT. OF PERSONS AND HOW PAID.		
	Cash.	Check.	Total.	Cash.	Check.	Total.
Drugs	140	.....	140	100.00	.....	100.00
Dry goods	835	31	866	96.42	3.58	100.00
Groceries	181	79	263	69.96	30.04	100.00
Hardware	128	28	156	82.05	17.95	100.00
Miscellaneous	927	47	974	95.17	4.83	100.00
Total	2,214	185	2,399	92.29	7.71	100.00

In the wholesale lines included when considered as a whole, 2214, or 92.29 per cent. of 2,399 persons investigated, received their earnings in cash, while only 185, or 7.71 per cent. were paid in checks.

Even here there is some variation as between the industries. In drugs all were paid in cash. In dry goods 96.42 per cent., and in groceries 69.96 per cent. were paid in cash. The figures for hardware shows that 82.05 per cent. were paid in cash and 17.95 per cent. in checks; while in miscellaneous 95.17 per cent. received cash for what they had earned.

Fewer persons are included in these two tables than in those by which they are preceded. It is believed, however, that the tables are comprehensive enough to fairly represent the situation in this state.

EMPLOYMENT AND EARNINGS IN RETAIL MERCANTILE ESTABLISHMENTS.

Data relating to employment and earnings in retail mercantile establishments during the year 1900 and the first six months of 1901 were also obtained. These establishments were classified as follows:

CLASSIFICATION OF ESTABLISHMENTS AND NUMBER OF PERSONS INCLUDED.

CLASSIFICATION.	1900		1901	
	Number establishments.	Number employed.	Number establishments.	Number employed.
Boots and shoes	39	116	39	122
Butchers	17	71	17	73
Clothing	62	341	62	390
Drugs	81	230	81	233
Dry goods	58	786	58	810
Farm implements	25	61	25	60
Flour, feed, grain	22	172	22	153
Furniture	47	331	47	318
General store	556	2,064	556	2,187
Groceries	58	241	58	244
Hardware	118	424	118	438
Jewelry	24	43	24	44
Lumber, retail	15	639	15	672
Miscellaneous	115	571	115	583
Total	1,273	6,090	1,273	6,327

The number of establishments which reported was 1,273. These have been classified into 14 separate industries and together employed on the average 6,090 persons in 1900 and 6,327 persons in 1901.

As between the different classes the establishments reporting varied in number from 15 in the case of retail lumber to 556 in the case of general stores. The number of persons employed as between the industries show even greater variations. Thus we find in 1900 that jewelry had 43 and general stores 2,064 persons, while in 1901 the variation was from 44 to 2,187 persons in the same industries.

The data obtained has been classified so as to show, by industries in 1900 and 1901, the classified weekly earnings, the

number of persons employed by months, the hours of labor daily, how often wages were paid, and whether it was paid in cash or checks.

The classified weekly earnings are shown by industries in a series of 14 tables. In these tables the amount of the weekly earnings appear in classified form. Then appear the number of males and females, respectively, whose weekly earnings came within each of these classes, together with the per cent. which the number in each class constitute of the total of all classes.

The number of persons employed by months is presented in 28 tables. The first half of these show, by industries, the number employed each month in 1900, and the second half, by industries, the number each of the six months in 1901. From the number each month has also been computed the range of employment and unemployment.

The hours of labor daily, by industries, are presented in two tables, one giving the actual number and the other the per cent. How often the salaries or wages were paid is presented by industries in one table, and this is also the case with the respective number of persons who received their earnings in cash and checks.

As in the case of wholesale establishments, these tables include all sorts of employes except superintendents, managers and partners.

The classified earnings are for the week in 1901 during which the greatest number of persons were employed.

BOOTS AND SHOES.

CLASSIFICATION OF WEEKLY EARNINGS.	NUMBER.			PER CENT.		
	Male.	Female.	Total.	Male.	Female.	Total.
Under \$5.00	14	4	18	12.72	23.53	14.17
\$5.00 but under \$6.00 ..	6	4	10	5.45	23.53	7.87
\$6.00 but under \$7.00 ..	3	5	8	2.73	29.40	6.22
\$7.00 but under \$8.00 ..	10	.....	10	9.69	.....	7.87
\$8.00 but under \$9.00 ..	7	2	9	6.37	11.77	7.08
\$9.00 but under \$10.00 ..	13	.....	13	11.82	.....	10.24
\$10.00 but under \$12.00 ..	23	2	25	20.91	11.77	19.68
\$12.00 but under \$15.00 ..	16	.....	16	14.55	.....	12.59
\$15.00 but under \$20.00 ..	14	.....	14	12.72	.....	11.03
\$20.00 and over	4	.....	4	3.64	.....	3.25
Total	110	17	127	100.00	100.00	100.00
Per cent.	86.61	13.39	100.00	.....	.....	.....

BUTCHERS.

CLASSIFICATION OF WEEKLY EARNINGS.	NUMBER.			PER CENT.		
	Male.	Female.	Total.	Male.	Female.	Total.
Under \$5.00	3	3	6	4.17	50.00	7.69
\$5.00 but under \$6.00	4	1	5	5.55	17.00	6.41
\$6.00 but under \$7.00	5	.....	5	6.94	.....	6.41
\$7.00 but under \$8.00	14	.....	14	19.44	.....	17.95
\$8.00 but under \$9.00	7	1	8	9.72	17.00	10.26
\$9.00 but under \$10.00	15	.....	15	20.82	.....	19.23
\$10.00 but under \$12.00	13	.....	13	18.08	.....	16.67
\$12.00 but under \$15.00	6	1	7	8.34	16.00	8.97
\$15.00 but under \$20.00	5	.....	5	6.94	.....	6.41
\$20.00 and over .....	.....	.....	.....	.....	.....	.....
Total	72	6	78	100.00	100.00	100.00
Per cent.	92.30	7.70	100.00	.....	.....	.....

CLOTHING.

CLASSIFICATION OF WEEKLY EARNINGS.	NUMBER.			PER CENT.		
	Male.	Female.	Total.	Male.	Female.	Total.
Under \$5.00	23	19	42	7.24	27.55	10.82
\$5.00 but under \$6.00	19	18	37	5.95	26.09	9.54
\$6.00 but under \$7.00	13	12	25	4.07	17.38	6.31
\$7.00 but under \$8.00	10	3	13	3.13	4.35	3.35
\$8.00 but under \$9.00	20	7	27	6.27	10.14	6.96
\$9.00 but under \$10.00	41	5	46	12.86	7.25	11.85
\$10.00 but under \$12.00	54	3	57	16.92	4.35	14.79
\$12.00 but under \$15.00	60	2	62	18.81	2.89	15.93
\$15.00 but under \$20.00	52	.....	52	16.31	.....	13.45
\$20.00 and over	27	.....	27	8.44	.....	6.95
Total	319	69	388	100.00	100.00	100.00
Per cent.	82.22	17.78	100.00	.....	.....	.....

DRUGS.

CLASSIFICATION OF WEEKLY EARNINGS.	NUMBER.			PER CENT.		
	Male.	Female.	Total.	Male.	Female.	Total.
Under \$5.00	65	7	72	28.63	41.15	29.50
\$5.00 but under \$6.00	12	3	15	5.29	17.64	6.19
\$6.00 but under \$7.00	12	2	14	5.29	11.77	5.74
\$7.00 but under \$8.00	10	1	11	4.41	5.89	4.10
\$8.00 but under \$9.00	19	2	21	8.37	11.77	8.61
\$9.00 but under \$10.00	9	.....	9	3.95	.....	3.69
\$10.00 but under \$12.00	26	.....	26	11.44	.....	10.66
\$12.00 but under \$15.00	31	1	32	13.66	5.89	13.10
\$15.00 but under \$20.00	31	1	32	13.66	5.89	13.10
\$20.00 and over	12	.....	12	5.29	.....	5.31
Total	227	17	244	100.00	100.00	100.00
Per cent.	93.03	6.97	100.00	.....	.....	.....

DRY GOODS.

CLASSIFICATION OF WEEKLY EARNINGS.	NUMBER.			PER CENT.		
	Male.	Female.	Total.	Male.	Female.	Total.
Under \$5.00	75	310	385	27.99	46.00	40.85
\$5.00 but under \$6.00 ..	20	135	155	7.44	20.03	16.55
\$6.00 but under \$7.00 ..	12	95	107	4.48	14.09	11.35
\$7.00 but under \$8.00 ..	19	48	67	7.09	7.12	7.10
\$8.00 but under \$9.00 ..	12	27	39	4.48	4.00	4.14
\$9.00 but under \$10.00 ..	15	17	32	5.60	2.52	3.99
\$10.00 but under \$12.00 ..	28	15	43	10.45	2.23	4.56
\$12.00 but under \$15.00 ..	37	53	90	13.81	1.93	5.30
\$15.00 but under \$20.00 ..	26	6	32	9.70	1.89	3.38
\$20.00 and over	24	8	32	8.96	1.19	3.38
Total	268	674	942	100.00	100.00	100.00
Per cent.	28.45	71.55	100.00			

FARM IMPLEMENTS.

CLASSIFICATION OF WEEKLY EARNINGS.	NUMBER.			PER CENT.		
	Male.	Female.	Total.	Male.	Female.	Total.
Under \$5.00	3	2	5	3.57	100.00	5.81
\$5.00 but under \$6.00 ..	2	.....	2	2.38	.....	2.35
\$6.00 but under \$7.00 ..	7	.....	7	8.40	.....	8.23
\$7.00 but under \$8.00 ..	2	.....	2	2.38	.....	2.32
\$8.00 but under \$9.00 ..	10	.....	10	11.90	.....	11.62
\$9.00 but under \$10.00 ..	20	.....	20	23.80	.....	23.24
\$10.00 but under \$12.00 ..	16	.....	16	19.01	.....	18.56
\$12.00 but under \$15.00 ..	15	.....	15	17.85	.....	17.43
\$15.00 but under \$20.00 ..	8	.....	8	9.52	.....	9.28
\$20.00 and over	1	.....	1	1.19	.....	1.16
Total	84	2	86	100.00	100.00	100.00
Per cent.	97.68	2.32	100.00			

FLOUR, FEED AND GRAIN.

CLASSIFICATION OF WEEKLY EARNINGS.	NUMBER.			PER CENT.		
	Male.	Female.	Total.	Male.	Female.	Total.
Under \$5.00	43	44	87	17.48	88.00	29.39
\$5.00 but under \$6.00 ..	8	2	10	3.25	4.00	3.37
\$6.00 but under \$7.00 ..	34	2	36	13.82	4.00	12.16
\$7.00 but under \$8.00 ..	49	2	51	19.92	4.00	17.26
\$8.00 but under \$9.00 ..	28	.....	28	11.38	.....	9.46
\$9.00 but under \$10.00 ..	29	.....	29	11.79	.....	9.79
\$10.00 but under \$12.00 ..	23	.....	23	8.94	.....	7.43
\$12.00 but under \$15.00 ..	20	.....	20	8.13	.....	6.74
\$15.00 but under \$20.00 ..	7	.....	7	2.85	.....	2.37
\$20.00 and over	6	.....	6	2.44	.....	2.03
Total	246	50	296	100.00	100.00	100.00
Per cent.	83.11	16.89	100.00			

FURNITURE.

CLASSIFICATION OF WEEKLY EARNINGS.	NUMBER.			PER CENT.		
	Male.	Female.	Total.	Male.	Female.	Total.
Under \$5.00	20	4	24	5.81	33.00	6.77
\$5.00 but under \$6.00 ..	13	4	17	3.77	33.00	4.77
\$6.00 but under \$7.00 ..	21	4	31	7.85	34.00	8.70
\$7.00 but under \$8.00 ..	17	.....	17	4.95	.....	4.77
\$8.00 but under \$9.00 ..	27	.....	27	7.85	.....	7.58
\$9.00 but under \$10.00 ..	45	.....	45	13.08	.....	12.64
\$10.00 but under \$12.00 ..	55	.....	55	15.99	.....	15.44
\$12.00 but under \$15.00 ..	101	.....	101	29.36	.....	28.37
\$15.00 but under \$20.00 ..	27	.....	27	7.85	.....	7.58
\$20.00 and over	12	.....	12	3.49	.....	3.38
Total	344	12	356	100.00	100.00	100.00
Per cent.	96.63	3.37	100.00	.....	.....	.....

GENERAL MERCHANDISE.

CLASSIFICATION OF WEEKLY EARNINGS.	NUMBER.			PER CENT.		
	Male.	Female.	Total.	Male.	Female.	Total.
Under \$5.00	175	408	583	10.68	44.93	22.89
\$5.00 but under \$6.00 ..	127	196	323	7.75	21.59	12.63
\$6.00 but under \$7.00 ..	189	125	314	11.53	13.77	12.33
\$7.00 but under \$8.00 ..	207	87	294	12.63	9.58	11.54
\$8.00 but under \$9.00 ..	196	41	237	11.95	4.52	9.31
\$9.00 but under \$10.00 ..	179	8	187	10.92	.86	7.34
\$10.00 but under \$12.00 ..	237	22	259	14.44	2.42	10.18
\$12.00 but under \$15.00 ..	141	11	152	8.60	1.21	5.96
\$15.00 but under \$20.00 ..	142	3	145	8.66	.34	6.69
\$20.00 and over	46	7	53	2.84	.78	2.08
Total	1,639	908	2,547	100.00	100.00	100.00
Per cent.	64.35	35.65	100.00	.....	.....	.....

GROCERIES.

CLASSIFICATION OF WEEKLY EARNINGS.	NUMBER.			PER CENT.		
	Male.	Female.	Total.	Male.	Female.	Total.
Under \$5.00	22	10	32	9.69	30.30	12.31
\$5.00 but under \$6.00 ..	23	11	34	10.13	33.33	13.09
\$6.00 but under \$7.00 ..	16	7	23	7.05	21.21	8.85
\$7.00 but under \$8.00 ..	23	3	28	11.03	9.09	10.74
\$8.00 but under \$9.00 ..	21	2	23	9.25	6.07	8.85
\$9.00 but under \$10.00 ..	32	.....	32	14.10	.....	12.31
\$10.00 but under \$12.00 ..	53	.....	53	23.34	.....	20.39
\$12.00 but under \$15.00 ..	20	.....	20	8.81	.....	7.69
\$15.00 but under \$20.00 ..	10	.....	10	4.40	.....	6.85
\$20.00 and over	5	.....	5	2.20	.....	1.92
Total	227	33	260	100.00	100.00	100.00
Per cent.	87.30	12.70	100.00	.....	.....	.....

HARDWARE.

CLASSIFICATION OF WEEKLY EARNINGS.	NUMBER.			PER CENT.		
	Male.	Female.	Total.	Male.	Female.	Total.
Under \$5.00	25	3	28	5.47	13.05	5.82
\$5.00 but under \$6.00 ..	15	5	20	3.28	21.74	4.10
\$6.00 but under \$7.00 ..	23	4	27	5.01	17.37	5.61
\$7.00 but under \$8.00 ..	46	4	50	10.01	17.37	10.40
\$8.00 but under \$9.00 ..	49	3	52	10.70	13.05	10.81
\$9.00 but under \$10.00 ..	84	1	85	18.34	4.37	17.67
\$10.00 but under \$12.00 ..	75	3	78	16.40	13.05	16.30
\$12.00 but under \$15.00 ..	98	.....	98	21.40	.....	20.40
\$15.00 but under \$20.00 ..	37	.....	37	8.08	.....	7.19
\$20.00 and over	6	.....	6	1.31	.....	1.20
Total	458	23	481	100.00	100.00	100.00
Per cent.	95.20	4.80	100.00	.....	.....	.....

JEWELERS.

CLASSIFICATION OF WEEKLY EARNINGS.	NUMBER.			PER CENT.		
	Male.	Female.	Total.	Male.	Female.	Total.
Under \$5.00	6	6	12	15.38	50.00	23.50
\$5.00 but under \$6.00 ..	4	3	7	10.24	25.00	13.73
\$6.00 but under \$7.00 ..	1	.....	1	2.56	.....	1.96
\$7.00 but under \$8.00 ..	2	.....	2	5.12	.....	3.92
\$8.00 but under \$9.00 ..	6	3	9	15.38	25.00	17.66
\$9.00 but under \$10.00 ..	1	.....	1	2.56	.....	1.96
\$10.00 but under \$12.00 ..	5	.....	5	12.90	.....	9.80
\$12.00 but under \$15.00 ..	8	.....	8	20.48	.....	15.69
\$15.00 but under \$20.00 ..	3	.....	3	7.69	.....	5.89
\$20.00 and over	3	.....	3	7.69	.....	5.89
Total	39	12	51	100.00	100.00	100.00
Per cent.	76.46	23.54	100.00	.....	.....	.....

LUMBER.

CLASSIFICATION OF WEEKLY EARNINGS.	NUMBER.			PER CENT.		
	Male.	Female.	Total.	Male.	Female.	Total.
Under \$5.00	13	5	18	1.28	100.00	1.79
\$5.00 but under \$6.00 ..	3	.....	3	.30	.....	.29
\$6.00 but under \$7.00 ..	193	.....	193	18.98	.....	18.89
\$7.00 but under \$8.00 ..	235	.....	235	23.11	.....	22.94
\$8.00 but under \$9.00 ..	153	.....	153	15.04	.....	14.98
\$9.00 but under \$10.00 ..	94	.....	94	9.24	.....	9.19
\$10.00 but under \$12.00 ..	185	.....	185	18.19	.....	18.13
\$12.00 but under \$15.00 ..	111	.....	111	10.91	.....	10.86
\$15.00 but under \$20.00 ..	20	.....	20	1.97	.....	1.96
\$20.00 and over	10	.....	10	.98	.....	.97
Total	1,017	5	1,022	100.00	100.00	100.00
Per cent.	99.51	.49	100.00	.....	.....	.....

MISCELLANEOUS.

CLASSIFICATION OF WEEKLY EARNINGS.	NUMBER.			PER CENT.		
	Male.	Female.	Total.	Male.	Female.	Total.
Under \$5.00	53	40	93	8.70	37.38	12.99
\$5.00 but under \$6.00 ..	28	23	51	4.60	21.50	7.15
\$6.00 but under \$7.00 ..	21	17	38	3.45	15.89	5.30
\$7.00 but under \$8.00 ..	43	9	52	7.06	8.41	7.29
\$8.00 but under \$9.00 ..	37	4	41	6.08	3.74	5.74
\$9.00 but under \$10.00 ..	126	3	123	19.70	2.80	17.19
\$10.00 but under \$12.00 ..	102	7	109	16.75	6.54	13.14
\$12.00 but under \$15.00 ..	91	4	95	14.94	3.74	13.29
\$15.00 but under \$20.00 ..	75	.....	75	12.31	.....	10.47
\$20.00 and over	59	.....	59	6.41	.....	5.44
Total	609	107	716	100.00	100.00	100.00
Per cent.	85.06	14.94	100.00	.....	.....	.....

The foregoing tables furnish a fairly good description of the classified earnings in the industries included. It is true that they do not give the absolute earnings of each person, nor do they permit of exact comparisons. But this is almost out the question under any method of description yet discovered. The number of persons who receive wages is so great, and the rate of wages and time of employment vary so much that exact measurements are seldom possible. The description presented, however, is as nearly complete as any that could have been given under the circumstances. It is not only a possible picture of the situation at the time, but the account is complete enough to furnish the necessary means for comparing the condition in these industries with that of others.

The tables have been combined into one, and the result of this combination is as follows:

TOTAL NUMBER AND PER CENT. OF MALES AND FEMALES RECEIVING
CLASSIFIED WEEKLY EARNINGS.

CLASSIFICATION OF WEEKLY EARNINGS.	NUMBER.			PER CENT.		
	Male	Female	Total.	Male.	Female.	Total.
Under \$5.00	540	865	1,405	9.55	44.70	18.50
\$5.00 but under \$6.00 ..	284	405	689	5.03	20.93	9.07
\$6.00 but under \$7.00 ..	556	273	829	9.81	14.11	10.91
\$7.00 but under \$8.00 ..	689	157	846	12.18	8.11	11.14
\$8.00 but under \$9.00 ..	592	92	684	10.46	4.76	9.12
\$9.00 but under \$10.00 ..	697	34	731	12.32	1.76	9.63
\$10.00 but under \$12.00 ..	894	52	946	15.79	2.69	12.46
\$12.00 but under \$15.00 ..	755	32	787	13.34	1.65	10.26
\$15.00 but under \$20.00 ..	457	10	467	8.06	.52	6.15
\$20.00 and over	195	15	210	3.44	.77	2.76
Total	5,659	1,935	7,594	100.00	100.00	100.00
Percentages ..	74.52	25.48	100.00	.....	.....	.....

Having combined the 14 tables into one there is necessarily this result that the combination table will show the condition as a whole.

Among the first things to be noted in the above table is the total number of persons included in it. The total number of persons was 7,594. Of these, 5,659, or 74.52 per cent., were males, and 1,935, or 25.48 per cent. were females. About three-fourths of those who are employed in the retail stores in this state are thus seen to be male persons.

The table as a whole is a good illustration of the earnings of those who are employed in the various mercantile establishments in this state. It also affords many opportunities for comparisons not only as between the males and females, but as between the earnings here and those of other occupations as given in this report. In order that it may be even more valuable from this point of view the table has been reduced into a still smaller form.

CLASSIFICATION OF WEEKLY EARNINGS.	NUMBER.			PER CENT.		
	Male.	Female.	Total.	Male.	Female.	Total.
Under \$5.00 per week ...	540	865	1,405	9.55	44.70	18.50
\$5.00 but under \$7.00 ..	840	673	1,513	14.18	35.04	19.98
\$7.00 but under \$9.00 ..	1,281	249	1,530	22.64	12.87	20.06
\$9.00 but under \$12.00 ..	1,531	86	1,617	28.11	4.46	22.19
\$12.00 and over	1,407	57	1,464	24.86	2.94	19.07
Total	5,659	1,935	7,594	100.00	100.00	100.00

Here the table which includes all of the 14 industries has been reduced to a still smaller compass. This reduction was brought about by combining the classifications of earnings, so that these classes as they now stand are much fewer in number than is the case before the reduction was made. The purpose of this is, as has already been alluded to, to bring the facts into a form where they could be more easily studied and compared.

Dropping the number and taking up the percentages we find first that 9.55 per cent. of the males; 44.70 per cent. of the females, and 18.50 per cent. of the total for both received less than \$5 per week. This is the lowest class among those in which the earnings were divided; and it is worth noticing that while it included less than ten per cent. of the male persons, it has nearly 45 per cent. of the females. This is certainly a wide discrepancy and illustrates perhaps as forcibly as any figures that could be named the great difference that exists between the earnings of men and women even where they are engaged in the same kind of work.

Another step down the table and the second class, that of \$5 but under \$7 is reached. Here were found 14.18 per cent. of the male persons, 35.04 per cent. of the female, and 19.98 per cent. of the total. The difference in the earnings as between the two sexes was still very marked but not quite as much so as in the preceding class.

The third class that of \$7 but under \$9 includes 22.64 per cent. of the male persons, 12.87 per cent. of the female and 20.06 per cent. of the total. Here the situation had been reversed. In the two classes which preceded the proportion of females had been the largest, but in this case the males were in the lead and

very perceptibly so, though as a whole the two were closer together than in any other class.

In the class \$9 but under \$12 the relation was males 28.11, females 4.45; and total 22.09 per cent. At this point the earnings may be said to have been fair. The proportion of female persons in this class was extremely small.

The last class, \$12 and over, had still fewer females, in fact they amounted only to a little less than three per cent. Even the male persons show a decrease from the preceding class and the proportion is only at 24.86 per cent., while the total of both was 19.07 per cent.

It is further apparent that earnings at the rate of \$1.50 per day and over was received by 2,998, or 52.97 per cent. of the male persons; by 143 or 7.39 per cent. of the female persons; and 3,141, or 41.16 per cent. of the total of both sexes.

These facts show not only that there is a great difference between the earnings of male and female persons even in mercantile establishments, but they indicate approximately at least the amount of this difference. Regarding the causes why the standard of earnings is so much higher for the men nothing is revealed, nor is this within the scope of this investigation.

In the following three tables an attempt has been made to so present the per cent. of the male, female, and total persons, respectively, by industries, that at least a rough comparison of the facts for each industry might be made possible.

SHOWING, BY INDUSTRIES, THE PER CENT. OF MALE PERSONS RECEIVING CLASSIFIED WEEKLY EARNINGS.

Classification.	Under \$5.00.	\$5.00 but under \$7.00.	\$7.00 but under \$9.00.	\$9.00 but under \$12.00.	\$12.00 and over.
Boots and shoes	12.72	8.18	15.46	32.73	30.91
Butchers	4.17	12.49	29.16	38.90	15.28
Clothing	7.24	10.02	9.40	29.78	43.56
Drugs	28.63	10.58	12.78	15.40	32.61..
Dry goods	27.99	11.92	11.57	16.05	32.47
Farm implements	3.57	10.78	14.28	42.81	28.56
Flour, feed, etc.	17.48	17.07	31.30	20.73	13.42
Furniture	5.81	11.62	12.80	29.07	40.70
General merchandise	10.68	19.28	24.58	25.36	20.10
Groceries	9.69	17.18	20.28	37.44	15.41
Hardware	5.47	8.29	20.71	34.74	30.79
Jewelry	15.38	12.80	20.50	15.46	35.86
Lumber, retail	1.28	19.28	38.15	27.43	13.86
Miscellaneous	8.70	8.06	13.14	36.45	33.66
All Industries	9.55	14.18	22.64	28.11	24.86

SHOWING, BY INDUSTRIES, THE PER CENT. OF FEMALE PERSONS
RECEIVING CLASSIFIED WEEKLY EARNINGS.

Classification.	Under \$5.00.	\$5.00 but under \$7.00.	\$7.00 but under \$9.00.	\$9.00 but under \$12.00.	\$12.00 and over.
Boots and shoes	23.53	52.93	11.77	11.77	.....
Butchers .....	.50	.17	.17	.....	.16
Clothing	27.55	43.47	14.49	11.60	2.89
Drugs	41.15	29.41	1.66	.....	11.78
Dry goods	46.00	54.12	11.12	4.75	4.01
Farm implements	100.00	.....	.....	.....	.....
Flour, feed, etc.	88.00	8.00	4.00	.....	.....
Furniture	33.00	67.00	.....	.....	.....
General merchandise	44.93	35.36	14.10	3.28	2.33
Groceries	30.50	54.54	15.16	.....	.....
Hardware	13.05	29.11	30.42	17.42	.....
Jewelry	50.00	25.00	25.00	.....	.....
Lumber, retail	100.00	.....	.....	.....	.....
Miscellaneous	37.38	37.39	12.15	9.34	8.74
Total	44.70	35.04	12.87	4.45	2.94

SHOWING, BY INDUSTRIES, THE PER CENT. OF THE TOTAL PERSONS
RECEIVING CLASSIFIED WEEKLY EARNINGS.

Classification.	Under \$5.00.	\$5.00 but under \$7.00.	\$7.00 but under \$9.00.	\$9.00 but under \$12.00.	\$12.00 and over.
Boots and shoes	14.17	14.09	14.95	29.92	26.57
Butchers	7.67	12.82	28.21	35.90	15.38
Clothing	10.82	15.85	10.31	26.64	36.38
Drugs	29.50	11.93	12.71	14.35	31.51
Dry goods	40.85	27.90	11.24	7.95	12.06
Farm implements	5.81	10.58	13.94	41.80	27.87
Flour, feed, etc.	29.39	15.53	26.72	17.22	11.14
Furniture	6.77	13.47	12.35	28.08	39.33
General merchandise	22.69	25.01	20.85	17.52	13.73
Groceries	12.31	21.94	19.59	32.70	13.46
Hardware	5.82	9.71	21.21	33.97	29.29
Jewelry	33.50	15.69	21.58	11.76	27.47
Lumber, retail	1.79	19.18	37.92	37.32	13.79
Miscellaneous	12.99	12.45	13.03	32.33	29.20
Total	18.50	19.98	20.06	22.09	19.07

While the above tables are intended as a comparison of the earnings in the various industries it is not claimed for them that they will show the exact difference in the earnings that is plainly detected as between these industries. Some of the reasons why the earnings as a whole cannot be measured down to the last fraction have already been mentioned. One thing, however, the tables do show and that is the per cent. of persons in each class. This, at the first glance, may not be regarded as of great importance. Upon a closer study, however, it will appear in a different light. It will be discovered that a comparison and study

of the classes will gradually lead to development of the situation as a whole, and thus in the end disclose what is after all the real standard of earnings in each case.

What has thus been said might be easily illustrated in various ways. Take dry goods and farm implements for example and a notable difference in the earnings in two cases will at once be discovered. In the lowest class in the table for the total, that of \$5 and under, are 40.85 per cent. of those who were employed in the dry goods line and only 5.81 per cent. of those who were employed in the farm implement line. These figures of themselves without any further inquiry would almost be sufficient for the forming of a judgment. But going to the next lowest class and it is found that the facts there simply confirm what has already been pointed out in the lowest class. In class \$7 but under \$9, made up mostly of those whose rate of wages was \$1.25, the per cent. of those in the farm implement business was 13.94 as against 11.24 in the dry goods line. In the class \$9 but under \$12, farm implements show almost six times as large a proportion as dry goods and in the last or highest class more than twice the proportion. But in other words these comparisons show that in dry goods the proportion of those employed largely predominate in the two classes for the lowest earnings, while for farm implements the proportion is much greater in the three higher classes of earnings. From this fact alone it is plain that the earnings were much higher in the farm implement line than in dry goods. It is of course a fact that in industries where the earnings were more nearly the same than was the case in the two which have just been used as illustrations such comparisons as those given are somewhat less of a success, but even in such cases the difference can usually be detected.

In the foregoing pages has thus been shown the "classified weekly earnings" in 14 retail mercantile lines. The facts included in this were presented both in tabular and textual form, and in this manner the condition in question is quite fully described. What has thus been shown may be regarded as the first part of this investigation.

The second part is next in order. This part relates to the number of persons employed by months and to the range of em-

ployment and unemployment. The range of employment is an important factor in the earnings and vitally affects the well being of the wage-earners. No statement of earnings or description of the conditions of labor can possibly be complete without some facts bearing upon the time it is possible to find something to do, or to keep employed.

BOOTS AND SHOES.

Persons Employed, by Months, and the Range of Employment and Unemployment in 1922.

Months.	Male.	Range of employment. Per cent.	Range of unemployment. Per cent.
January	116	96.67	3.33
February	114	95.00	5.00
March	114	95.00	5.00
April	114	95.00	5.00
May	114	95.00	5.00
June	114	95.00	5.00
July	116	96.67	3.33
August	116	96.67	3.33
September	117	97.50	2.50
October	117	97.50	2.50
November	120	100.00	.00
December	120	100.00	.00
Average	116	96.97	3.33

BUTCHERS.

Persons Employed, by Months, and the Range of Employment and Unemployment in 1900.

Months.	Male.	Range of employment. Per cent.	Range of unemployment. Per cent.
January	71	98.61	1.39
February	71	98.61	1.39
March	71	98.61	1.39
April	72	100.00	.00
May	68	94.45	5.55
June	68	94.45	5.55
July	71	98.61	1.39
August	71	98.61	1.39
September	70	97.22	2.78
October	72	100.00	.00
November	72	100.00	.00
December	72	100.00	.00
Average	71	98.61	1.39

CLOTHING.

Persons Employed, by Months, and the Range of Employment and Unemployment in 1900.

Months.	Male.	Range of employment. Per cent.	Range of unemployment. Per cent.
January	315	78.55	21.45
February	311	77.56	22.44
March	315	78.55	21.45
April	321	80.06	19.95
May	323	80.55	19.45
June	320	79.80	20.20
July	313	78.05	21.95
August	316	78.80	21.20
September	380	94.76	5.24
October	401	100.00	.00
November	388	96.76	3.24
December	389	97.01	2.99
Average	341	85.04	14.96

DRY GOODS.

Persons Employed, by Months, and the Range of Employment and Unemployment in 1900.

Months.	Male.	Range of employment. Per cent.	Range of unemployment. Per cent.
January	729	80.02	19.98
February	729	80.02	19.98
March	742	81.45	18.55
April	780	85.62	14.38
May	790	86.72	13.28
June	787	86.29	13.61
July	735	80.68	19.32
August	724	79.47	20.53
September	790	86.72	13.28
October	843	92.54	7.46
November	868	95.40	4.60
December	911	100.00	.00
Average	786	86.28	13.72

DRUGS.

Persons Employed, by Months, and the Range of Employment and Unemployment in 1900.

Months.	Male.	Range of employment. Per cent.	Range of unemployment. Per cent.
January	224	95.32	4.68
February	224	95.32	4.68
March	224	95.32	4.68
April	226	96.17	3.83
May	231	98.30	1.70
June	224	99.57	.43
July	225	100.00	.00
August	225	100.00	.00
September	224	99.57	.43
October	227	96.60	3.40
November	228	97.02	2.98
December	235	100.00	.00
Average	230	97.87	2.13

FARM IMPLEMENTS.

Persons Employed, by Months, and the Range of Employment and Unemployment in 1900.

Months.	Male	Range of employment. Per cent.	Range of unemployment. Per cent.
January	49	65.33	34.67
February	46	61.33	38.67
March	63	84.00	16.00
April	64	85.33	14.67
May	64	85.33	14.67
June	75	100.00	
July	73	97.33	2.67
August	60	80.00	20.00
September	67	89.33	10.67
October	63	84.00	16.00
November	69	80.00	20.00
December	47	62.67	37.33
Average	61	81.33	18.67

FLOUR, FEED AND GRAIN.

Persons Employed, by Months, and the Range of Employment and Unemployment in 1900.

Months.	Male.	Range of employment. Per cent.	Range of unemployment. Per cent.
January	159	78.33	21.67
February	154	75.86	24.14
March	157	77.34	22.66
April	167	82.27	17.73
May	163	80.30	19.70
June	203	100.00	
July	160	78.82	21.18
August	173	85.22	14.78
September	195	96.06	3.94
October	188	92.61	7.39
November	179	88.18	11.82
December	168	82.76	17.24
Average	172	84.73	15.27

FURNITURE.

Persons Employed, by Months, and the Range of Employment and Unemployment, in 1900.

Months.	Male	Range of employment. Per cent.	Range of unemployment. Per cent.
January	329	95.36	4.64
February	325	94.20	5.80
March	330	95.65	4.35
April	336	97.39	2.61
May	334	96.81	3.19
June	340	98.55	1.45
July	320	92.75	7.25
August	322	93.33	6.67
September	325	94.20	5.80
October	333	96.52	3.48
November	335	97.10	2.90
December	345	100.00	
Average	331	95.94	4.06

RETAIL MERCANTILE ESTABLISHMENTS.

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GENERAL MERCHANDISE.

Persons Employed, by Months, and the Range of Employment and Unemployment, in 1900.

Months.	Male.	Range of employment. Per cent.	Range of un-employment. Per cent.
January	1,945	84.24	15.76
February	1,937	83.89	16.11
March	1,956	84.71	15.29
April	1,986	86.01	13.99
May	2,030	87.92	12.08
June	2,065	89.00	11.00
July	2,061	89.26	10.74
August	2,042	88.44	11.56
September	2,067	89.52	10.48
October	2,176	94.24	5.76
November	2,202	96.37	4.63
December	2,309	100.00	.....
Average	2,064	89.39	10.61

GROCERIES.

Persons Employed, by Months, and the Range of Employment and Unemployment, in 1900.

Months.	Male.	Range of employment. Per cent.	Range of un-employment. Per cent.
January	237	96.34	3.66
February	236	95.93	4.07
March	234	95.12	4.88
April	236	95.93	4.07
May	239	97.15	2.85
June	241	97.97	2.03
July	244	99.20	.80
August	246	100.00	.....
September	246	100.00	.....
October	243	98.78	1.22
November	246	100.00	.....
December	245	99.59	.41
Average	241	97.97	2.03

HAIRDWARE.

Persons Employed, by Months, and the Range of Employment and Unemployment, in 1900.

Months.	Male.	Range of employment. Per cent.	Range of un-employment. Per cent.
January	411	93.41	6.59
February	415	94.32	5.68
March	413	93.86	6.14
April	418	95.00	5.00
May	425	96.59	3.41
June	423	96.14	3.86
July	435	98.86	1.14
August	435	98.86	1.14
September	430	97.73	2.27
October	440	100.00	.....
November	430	97.73	2.27
December	414	94.00	5.91
Average	424	96.36	3.64

JEWELERS.

Persons Employed, by Months, and the Range of Employment and Unemployment, in 1900.

Months.	Male.	Range of employment. Per cent.	Range of unemployment. Per cent.
January	43	94.31	15.69
February	41	90.23	19.61
March	42	92.35	17.65
April	42	92.35	17.65
May	42	92.35	17.65
June	42	92.35	17.65
July	42	92.35	17.65
August	42	92.35	17.65
September	42	92.35	17.65
October	42	92.35	17.65
November	44	95.27	13.73
December	51	100.00	.....
Average	43	94.31	15.69

LUMBER.

Persons Employed, by Months, and the Range of Employment and Unemployment, in 1900.

Months.	Male.	Range of employment. Per cent.	Range of unemployment. Per cent.
January	79	93.83	6.18
February	841	100.00	.....
March	764	90.84	9.16
April	466	55.41	44.59
May	547	65.04	34.96
June	519	61.71	38.29
July	511	60.76	39.24
August	536	63.61	36.39
September	534	63.50	36.50
October	740	87.99	12.01
November	734	87.28	12.72
December	682	81.09	18.91
Average	639	75.98	24.02

MISCELLANEOUS.

Persons Employed, by Months, and the Range of Employment and Unemployment, in 1900.

Months.	Male.	Range of employment. Per cent.	Range of unemployment. Per cent.
January	486	69.13	30.87
February	503	71.55	28.45
March	502	71.41	28.69
April	525	74.68	25.32
May	545	77.52	22.48
June	541	76.96	23.04
July	584	83.07	16.93
August	590	83.93	16.07
September	591	84.07	15.93
October	607	86.34	13.66
November	678	96.44	3.56
December	703	100.00	.....
Average	571	81.22	18.78

BOOTS AND SHOES.

Persons Employed, by Months, the first six months in 1901, and the Range of Employment and Unemployment.

Months.	Male.	Range of employment. Per cent.	Range of un- employment. Per cent.
January	119	94.44	5.56
February	120	95.24	4.76
March	120	95.24	4.76
April	123	97.62	2.38
May	124	98.41	1.59
June	126	100.00	.....
Average	122	96.83	3.17

BUTCHERS.

Persons Employed, by Months, the first six months in 1901, and the Range of Employment and Unemployment.

Months.	Male.	Range of employment. Per cent.	Range of un- employment. Per cent.
January	74	98.67	1.33
February	74	98.67	1.33
March	74	98.67	1.33
April	75	100.00	.....
May	71	94.67	5.33
June	71	94.67	5.33
Average	73	97.33	2.67

CLOTHING.

Persons Employed, by Months, the first six months in 1901, and the Range of Employment and Unemployment.

Months.	Male.	Range of employment. Per cent.	Range of un- employment. Per cent.
January	387	96.75	3.25
February	377	94.25	5.75
March	386	96.50	3.50
April	393	98.25	1.75
May	398	99.50	.50
June	400	100.00	.....
Average	390	97.50	2.50

DRY GOODS.

Persons Employed, by Months, the first six months in 1901, and the Range of Employment and Unemployment.

Months.	Male.	Range of employment. Per cent.	Range of un-employment. Per cent.
January	762	88.40	11.60
February	765	88.75	11.25
March	768	89.61	10.39
April	856	99.30	.70
May	862	100.00	.....
June	847	98.26	1.74
Average	810	93.97	6.03

DRUGS.

Persons Employed, by Months, the first six months in 1901, and the Range of Employment and Unemployment.

Months.	Male.	Range of employment. Per cent.	Range of un-employment. Per cent.
January	228	93.06	6.94
February	228	93.06	6.94
March	228	93.06	6.94
April	234	95.51	4.49
May	237	96.73	3.27
June	245	100.00	.....
Average	233	95.10	4.90

FARM IMPLEMENTS.

Persons Employed, by Months, the first six months in 1901, and the Range of Employment and Unemployment.

Months.	Male.	Range of employment Per cent.	Range of un-employment Per cent.
January	48	63.16	36.84
February	48	63.16	36.84
March	59	77.63	22.37
April	63	82.89	17.11
May	66	86.84	13.16
June	76	100.00	.....
Average	60	78.95	21.05

FLOUR, FEED, GRAIN.

Persons Employed, by Months, the first six months in 1901, and the Range of Employment and Unemployment.

Months.	Male.	Range of employment. Per cent.	Range of unemployment. Per cent.
January	136	67.66	32.34
February	137	68.16	31.84
March	138	68.66	31.34
April	144	71.64	28.36
May	159	79.10	20.90
June	201	100.00	.....
Average	153	76.12	23.88

FURNITURE.

Persons Employed, by Months, the first six months in 1901, and the Range of Employment and Unemployment.

Months.	Male.	Range of employment. Per cent.	Range of unemployment. Per cent.
January	315	96.63	3.37
February	309	94.79	5.21
March	311	95.40	4.60
April	325	99.69	.31
May	324	99.39	.61
June	326	100.00	.....
Average	318	97.55	2.45

GENERAL MERCHANDISE.

Persons Employed, by Months, the first six months in 1901, and the Range of Employment and Unemployment.

Months.	Male.	Range of employment. Per cent.	Range of unemployment. Per cent.
January	2,163	93.39	6.61
February	2,131	92.61	7.99
March	2,060	88.95	11.05
April	2,222	95.94	4.06
May	2,230	96.29	3.71
June	2,316	100.00	.....
Average	2,187	94.43	5.57

GROCERIES.

Persons Employed, by Months, the first six months in 1901, and the Range of Employment and Unemployment.

Months.	Male.	Range of employment. Per cent.	Range of un-employment. Per cent.
January	242	97.98	2.02
February	241	97.57	2.43
March	242	97.98	2.02
April	244	98.79	1.21
May	245	99.19	.81
June	247	100.00	.....
Averages	244	98.79	1.21

HARDWARE.

Persons Employed, by Months, the first six months in 1901, and the Range of Employment and Unemployment.

Months.	Male.	Range of employment. Per cent.	Range of un-employment. Per cent.
January	426	94.67	5.33
February	431	95.78	4.22
March	428	95.11	4.89
April	443	98.44	1.56
May	450	100.00	.....
June	450	100.00	.....
Average	438	97.33	2.67

JEWELERS.

Persons Employed, by Months, the first six months in 1901, and the Range of Employment and Unemployment.

Months.	Male.	Range of employment. Per cent.	Range of un-employment. Per cent.
January	45	100.00	.....
February	44	97.78	2.22
March	44	97.78	2.22
April	44	97.78	2.22
May	44	97.78	2.22
June	44	97.78	2.22
Average	44	97.78	2.22

LUMBER.

Persons Employed, by Months, the first six months in 1901, and the Range of Employment and Unemployment.

Months.	Male.	Range of employment. Per cent.	Range of unemployment. Per cent.
January	735	76.17	23.83
February	965	100.00	.....
March	806	83.52	16.48
April	501	51.92	48.08
May	541	56.06	43.94
June	486	50.26	49.74
Average	672	69.64	30.36

MISCELLANEOUS.

Persons Employed, by Months, the first six months in 1901, and the Range of Employment and Unemployment.

Months.	Male.	Range of employment. Per cent.	Range of unemployment. Per cent.
January	579	97.15	2.85
February	572	96.97	4.03
March	576	96.64	3.36
April	592	99.33	.67
May	583	97.82	2.18
June	596	100.00	.....
Average	583	97.82	2.18

In the preceding two series of tables has thus been shown the number of persons employed by months, and the range of employment in 14 mercantile industries in this state for the year 1900 and for the first six months of 1901. There are thus two tables for each industry, one being devoted to facts for the former year, and one to those of the latter.

These tables are important. They show for each industry not only the number employed in each, but the extent of the variations in this respect from month to month. They are also made up in such a way that they may be readily studied and compared.

The following table includes all the industries for 1900 and hence constitutes a sort of a summary of the facts for this year.

ALL INDUSTRIES.

Total Persons Employed by Months, and Range of Employment and Unemployment, in 1900.

Months.	Total number employed.	Range of employment. Per cent.	Range of unemployment. Per cent.
January	5,903	88.22	11.78
February	5,931	88.73	11.27
March	5,927	88.59	11.41
April	5,753	85.98	14.02
May	5,915	88.40	11.60
June	5,962	89.10	10.90
July	5,900	88.17	11.83
August	5,907	88.27	11.73
September	6,088	90.93	9.02
October	6,492	97.02	2.98
November	6,584	98.40	1.60
December	6,691	100.00	.....
Average	6,090	90.98	9.02

Including all of the 14 retail lines it is seen from this table that the number employed each month in 1900 ranged from 5,753 persons in April to 6,691 in December, while the average was 6,090 persons. The difference between the greatest and smallest number was 938.

As the greatest number of persons employed was 6,691, it is proper to regard this figure as representing full employment, or as the figure upon which the range of unemployment should be based; for it is plain that in December all were employed who could possibly obtain employment in the establishments included. That December should show the greatest number is only what was to be expected in the retail line. This is the month when the holiday trade comes in, and when most of the stores sell more goods than at any other time during the year; and the greater the sales the greater is also the amount of the help needed.

The remaining eleven months show a smaller number, though in some cases the difference is not great. The number employed in November, for instance, amounted to about 98.40 per cent. of the greatest number, leaving only 1.60 per cent. unemployed. In October also conditions must have been favorable for at this time less than 3 per cent. were on the unemployed list. In

September the range of unemployment stood at 9 per cent. and for August and July at 11.73 and 11.83 per cent. respectively. June shows a slightly narrower range, the midsummer trade requiring more help, but in May the range is about what it was in September, while in April it is the widest of any month during the year, amounting to over 14 per cent. According to these figures the retail establishments needed less help in April than in any other month. During the first three months of the year the range was between 11 and 12 per cent., or approximately the same as in July and August.

The average stood at 6,090 persons, or within 90.98 per cent. of the highest number. The average range of unemployment was thus about 9 per cent.

The next table in order is a summary for the first six months of 1901. For this period is includes the same establishments as the table for 1900:

ALL INDUSTRIES.

Total Persons Employed, by Months, the first Six Months of 1901, and the Range of Employment and Unemployment During this Period.

Months.	Total number employed.	Range of employment. Per cent.	Range of un- employment. Per cent.
January	6,259	97.37	2.63
February	6,437	100.00	.....
March	6,240	97.66	2.32
April	6,309	98.15	1.85
May	6,335	98.55	1.45
June	6,430	99.89	.11
Average	6,327	98.55	1.45

Here are the figures for the first six months of 1901. During this period the greatest number, or 6,437 persons, were employed in February, and the smallest number, or 6,240 persons were found for March.

According to these figures February had full employment, and March the widest range of unemployment. The range, however, is narrow. In fact it falls below 3 per cent. at its widest point.

The average number employed was 6,327 persons, or 98.55 per cent. of the greatest number. This leaves the average range

of unemployment at less than one and one-half per cent. The fluctuations during this period are thus a trifle smaller than for the same period in 1900, and the average number employed, however, is greater.

Establishments employing 6,088 persons reported as to how often they paid their help for the services rendered and whether these payments were made in cash or by checks. These facts were compiled and presented in the following tables:

NUMBER OF PERSONS WHO RECEIVED THEIR SALARIES OR WAGES UPON DEMAND, OR WEEKLY AND MONTHLY.

INDUSTRIES.	NUMBER OF PERSONS, HOW PAID.			
	Demand.	Weekly.	Monthly.	Total.
Boots and shoes .....	.....	106	10	116
Butcher	15	16	40	71
Clothing	26	298	24	348
Drugs	21	132	77	230
Dry goods	15	754	17	786
Farm implements	16	23	22	61
Flour, feed and grain	29	126	9	164
Furniture	7	311	13	331
General store	497	853	714	2,064
Groceries	8	173	60	241
Hardware	34	321	68	423
Jewelers	5	31	7	43
Lumber	42	16	581	639
Miscellaneous	39	430	102	571
Total	754	3,590	1,744	6,088

PER CENT. OF PERSONS WHO RECEIVED THEIR SALARIES OR WAGES UPON DEMAND, OR WEEKLY AND MONTHLY.

INDUSTRIES.	PER CENT. OF PERSONS, HOW PAID.			
	Demand	Weekly.	Monthly.	Total.
Boots and shoes .....	.....	89.08	10.92	100.00
Butcher	21.13	22.53	56.34	100.00
Clothing	7.47	85.63	6.90	100.00
Drugs	9.13	57.39	33.48	100.00
Dry goods	1.91	95.93	2.16	100.00
Farm implements	26.23	37.70	36.07	100.00
Flour, feed, grain	17.68	76.83	5.49	100.00
Furniture	2.11	93.96	3.93	100.00
General store	24.08	41.32	34.60	100.00
Groceries	3.32	71.78	24.90	100.00
Hardware	8.04	75.88	16.08	100.00
Jewelers	11.63	72.09	16.28	100.00
Lumber	6.57	2.51	90.92	100.00
Miscellaneous	6.83	75.31	17.86	100.00
Total	12.38	58.97	28.65	100.00

The two preceding tables relate to how often the employes received their earnings. Some were paid whenever they happened to ask for it. Others again were paid regularly every week, while there were again others who were paid monthly. The first table in order show the number in each case, and the second the per cent.

It is perhaps well to notice the totals first. As said above, 6,088 persons are included in these tables. Of these persons, 754, or 12.38 per cent., were paid their wages off and on as they happened to ask for it. In a general way this can perhaps be said to amount to very much the same as weekly payments. The number paid weekly, regularly was 3,590. This is about 58.97 per cent. of the total. If the former number of 12.38 per cent. who were on demand is regarded as being in this group, those paid weekly would number 4,344 persons, or 71.35 per cent. of the total. Those in the monthly group were 1,744 in number, or 28.65 per cent. of the total. If this grouping is correct weekly payment would seem to be the rule in nearly three-fourths of the cases.

Considering the three groups separately, many facts might be adduced. Thus it is seen that in farm implements over 26 per cent. of the persons were paid on the demand while this was the case with over 24 per cent. in general stores, nearly 18 per cent. in flour and feed, and about 11.65 per cent. in jewelry. For the remaining industries the figures in the demand column are small except for butchers where they foot up to 21.13 per cent.

In lumber the number paid weekly is extremely small, amounting to only about two and one-half per cent. In three other cases butchers, farm implements, and general stores, the proportion is below 50 per cent. For the remaining industries it varies from about 60 to about 96 per cent.

Those paid monthly fall below 7 per cent. in clothing, dry goods, furniture and flour and feed. In eight others the number included varies from about 10 to about 36 per cent. and in one it stands at about 56 and in another at nearly 91 per cent. In this column therefore there is little or no uniformity as between the industries.

These facts show quite fully the general practices with regard to how often the employees are paid off. The next step will be to show how they are paid, that is how many are paid in cash and how many in checks.

NUMBER AND PER CENT. OF PERSONS WHO RECEIVED THEIR SALARIES AND WAGES IN CASH AND CHECKS, RESPECTIVELY.

INDUSTRIES.	NUMBER OF PERSONS AND HOW PAID.			PER CENT. OF PERSONS, HOW PAID.		
	Cash.	Check.	Total.	Cash.	Check.	Total.
Boots and shoes	114	2	116	95.80	4.20	100.00
Butcher .....	.....	71	71	.....	100.00	100.00
Clothing	316	32	348	90.80	9.20	100.00
Drugs	218	12	230	94.78	5.22	100.00
Dry goods	748	38	786	95.17	4.83	100.00
Farm implements	40	16	61	73.77	26.23	100.00
Flour, feed and grain	151	13	164	92.07	7.93	100.00
Furniture	297	34	331	89.73	10.27	100.00
General store	1,949	115	2,064	94.43	5.57	100.00
Groceries	229	12	241	95.02	4.98	100.00
Hardware	353	70	423	83.45	16.55	100.00
Jewelers	41	2	43	95.35	4.65	100.00
Lumber	536	103	639	83.88	16.12	100.00
Miscellaneous	440	131	571	77.06	22.94	100.00
Total	5,437	651	6,088	89.32	10.68	100.00

Here we have a fairly good illustration of how many were paid cash and checks respectively.

Of the 6,088 persons included, 5,437, or 89.32 per cent., were paid in cash, and 651 persons, or 10.68 per cent. were paid off in checks. Nine out of ten persons are thus receiving their earnings in cash.

Outside of butcher where all were paid in checks the proportion in this column is very small. In two industries only do they foot up to about one-fourth of the whole and in two others they make up about 16 per cent. in each case, while in the remaining 9 the per cent. is from about 10 down. Cash payments of salaries and wages in mercantile establishments can thus almost be said to be the rule in this state.

EMPLOYMENT AND EARNINGS IN SIX SKILLED INDUSTRIES.

In the following pages are presented tables showing "summaries of the number of persons receiving classified weekly earnings in the skilled trades included," "persons employed by months," the "number and per cent. of hours of labor per day," the "number and per cent of persons who received their wages weekly, semi-monthly, and monthly," whether paid "in cash, checks, or cash and checks," and the total yearly earnings of each industry together with the average number of men finding work and their average yearly earnings.

The tables include about twenty-five trades placed under six headings, viz: Carpenters, general contractors, masons and plasterers, painting and paper-hanging, plumbing, and miscellaneous. The latter includes about twenty occupations such as finishers, galvanizers, asphalt walk makers, sewer builders, house movers, well drillers, street pavers, etc.

The data contained in the tables were obtained direct from the employers themselves and apply only to employes working for wages, whether skilled or unskilled. What is meant by "unskilled" labor in this connection are those learning the trade either of carpenters, painters, paper hangers, plumbers, masons and plasterers, etc., or their helpers. Including this class with the "skilled" workmen, however, tends materially to lower the average yearly wage rate.

The principal facts collected in the investigation of these trades are set forth in six main tables. The first classifies the laborers into ten classes according to their weekly earnings. The first class embraces all persons receiving less than \$5 per week, the second, all persons who receive \$5 but less than \$6, etc., up to the class receiving \$20 per week and over. The first subdivision of the following table (I) shows the number of men belonging to each class in each industry, classified according to weekly earnings, together with the total for all industries; also

the total number receiving classified wages in each industry and the per cent. each of these numbers is of the whole.

The table shows that the greatest number of carpenters, general contractors, and painters and paperhangers received \$12 but under \$15, while the greatest number of masons and plasterers received \$20 and over and those belonging to the miscellaneous class and the plumbers received \$9 but under \$10 per week. Taken as a whole the greatest number (2,494) received \$12 but under \$15 per week, while the smallest number for each and all industries received \$5, but under \$6.

The total number of persons included in this table is 6,996. Of this number 1,549, or 22.14 per cent., were carpenters; 1,237, or 17.68 per cent., were employed as general contractors; 1,199, or 17.14 per cent. were masons and plasterers; 1,240 or 17.73 per cent., were employed in the miscellaneous occupations; 706, or 10.09 per cent., were painters and paperhangers; and 1,065 persons, or 15.22 per cent., were plumbers. Classified in order of numbers beginning with the largest working in each occupation, the carpenters come first, general contractors next, then masons and plasterers, followed by miscellaneous, then painters and paperhangers with plumbers last.

The same information is found in the second sub-division of this table that is contained in the first. The first tells the story in numbers, the second in per cent. 60.88 per cent. of the carpenters, 38.56 per cent. of the general contractors, and 62.32 per cent. of the painters and paper hangers received \$12.00 but under \$15.00. 35.65 per cent. of the total also belongs to this class; while 26.85 per cent. of the plumbers and 56.53 per cent. of the persons belonging to the miscellaneous occupations received \$9.00 but under \$10.00. This leaves only one occupation the greatest per cent. of whose workmen received \$20.00 and over. Another interesting feature the table exhibits is that less than seven per cent. of the whole number of workmen in these six skilled industries received less than \$8.00 per week while over 93 per cent received \$8.00 per week and over.

The third subdivision shows the number and per cent. of all persons who received \$9.00 per week and over, \$12.00 per week and over, and under \$12.00. It will be noticed that only in

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one class, that of the miscellaneous, do over 25 per cent. of the workmen receive less than \$12.00. See the following table.

SUMMARIES OF THE NUMBER OF PERSONS RECEIVING CLASSIFIED WEEKLY EARNINGS IN THE SKILLED TRADES INCLUDED.

Classification of weekly earnings.	Car-pen-ters.	Gener-al con-tract-ors.	Masons and plas-terers.	Mis-cell-an-eous.	Paint-ers, paper-hang-ers.	Plumb-ers.	Total.
Under \$5.00 per week	2	2	5	31	19	63	122
\$5.00 but under \$6.00	1	.....	.....	3	2	13	18
\$6.00 but under \$7.00	10	7	3	12	18	45	95
\$7.00 but under \$8.00	16	24	13	32	8	25	118
\$8.00 but under \$9.00	18	17	10	48	15	24	132
\$9.00 but under \$10.00	189	215	207	701	66	286	1,664
\$10.00 but under \$12.00	270	221	146	133	83	225	1,078
\$12.00 but under \$15.00	943	477	277	208	440	149	2,494
\$15.00 and under \$20.00	100	170	253	58	50	213	844
\$20.00 and over .....	.....	104	285	15	5	22	431
Total	1,549	1,237	1,199	1,240	706	1,065	6,996
Per cent.	22.14	17.68	17.14	17.73	10.09	15.22	100.00

SUMMARIES OF THE PER CENT. OF PERSONS, IN THE SKILLED TRADES INCLUDED, WHO RECEIVED CLASSIFIED WEEKLY EARNINGS

Classification of weekly earnings.	Car-pen-ters.	Gener-al con-tract-ors.	Masons and plas-terers.	Mis-cell-an-eous.	Paint-ers, paper-hang-ers.	Plumb-ers.	Per cent. of total.
Under \$5.00 .....	.13	.16	.42	2.50	2.69	5.92	1.74
\$5.00 but under \$6.00 .....	.06	.....	.....	.16	.28	1.22	.26
\$6.00 but under \$7.00 .....	.65	.57	.25	.97	2.55	4.23	1.36
\$7.00 but under \$8.00	1.03	1.94	1.08	2.58	1.13	2.35	1.69
\$8.00 but under \$9.00	1.16	1.37	.84	3.87	2.13	2.25	1.89
\$9.00 but under \$10.00	12.20	17.39	17.26	56.53	9.35	26.85	23.78
\$10.00 but under \$12.00	17.43	17.86	12.18	10.73	11.76	21.12	15.41
\$12.00 but under \$15.00	69.88	38.56	23.10	16.77	62.32	13.99	85.65
\$15.00 and under \$20.00	6.46	13.74	21.10	4.68	7.08	20.00	12.06
\$20.00 and over .....	.....	8.41	23.77	1.21	.71	2.07	6.16
Totals	100.00	100.00	100.00	100.00	100.00	100.00	100.00

COMPARISON OF CLASSIFIED WEEKLY EARNINGS IN THE
SKILLED TRADES INCLUDED.

Classification of weekly earnings.	Number.						Total.
	Carpenters.	General contractors.	Masons and plasterers.	Miscellaneous.	Painters, paper-hangers.	Plumbers.	
\$9.00 and over	1,502	1,187	1,168	1,115	644	895	6,511
\$12.00 and over	1,043	751	815	281	495	384	3,769
Under \$12.00	506	486	384	959	211	681	3,227

Per cent.							
\$9.00 and over	23.07	18.23	17.94	17.12	9.89	13.75	100.00
\$12.00 and over	27.67	19.93	21.62	7.46	13.13	10.19	100.00
Under \$12.00	15.68	15.06	11.90	29.71	6.54	21.11	100.00

Table II is an exhibit showing how many persons are employed each month during the year for all industries. In every instance except "painting and paper hanging" the smallest number was employed in February, and in the case of "painting and paperhanging" the smallest number was employed in January. The greatest number of carpenters and general contractors found work in August, masons and plasterers, in September, miscellaneous, in July, painters and paperhangers in May, and the plumbers and the greatest number for all industries found work in June. In comparing each industry with the total, that of the plumbers more nearly corresponds with the total than any other. This denotes that this industry is less effected by the seasons of the year than any other. While there was an average of 684 that found work in this industry during the whole year, there was only a variation of 276 between the number finding work in February and the number finding work in June. The carpenters, with an average of 836 working the entire year, had a variation of 369 between the month having the greatest, and the month having the smallest number employed. On the same basis, with an average of 627, there was a variation of 669 in the contractor's industry; with an average of 612, the masons and plasterers varied 661; with an average of 699, miscellaneous industries varied 768; with an average of 434, the painters and paperhangers varies 473. This is interesting because it shows the effect

the seasons have upon occupations. But this does not account for the whole difference. It will be noticed that the industry which can use the greatest number of skilled workmen has the least variation in the number employed. Take the carpenters as an illustration. While the skilled workmen of this industry may not be able to do out-door work in winter, he very profitably employs himself in-doors in the manufacture of such articles as casings, frames, etc., to be utilized in his out-door work. The same is more or less true of the plumbers. On the other hand, those employed in the miscellaneous occupations are not, to any great degree, skilled workmen; and this very fact determines to a large extent the occupation which a man follows. In these occupations a few skilled workmen can lay out and prepare work for a large number of unskilled laborers. The same may be said of the general contractors.

The total for all industries was 3,892. The number working at the carpenter's trade was 21.48 per cent. of this, the general contractors, 16.11 per cent., the masons and plasterers, 15.72 per cent., miscellaneous, 17.96 per cent., painters and paperhangers, 11.15 per cent., and the plumbers 17.58 per cent.

Part two of table II expresses the same thing in percentages that part one expresses in numbers. The greatest number found employed in any one month for each industry and the total is taken as 100 per cent., and the other numbers in each industry are percentages of this greatest number found at work in the various other months of the year.

Part three of this same table expresses just the opposite of part two. Instead of showing the per cent. of employment it shows the per cent. of unemployment. The percentages are here obtained by subtracting each per cent. in the preceeding table from 100 per cent. or the greatest number employed in any one month. Under the head of carpenters only 37.12 per cent. of those employed in August were unemployed in February while 73.19 per cent. of the general contractors were unemployed. 76.24 per cent. of the masons and plasterers working in September were unemployed in February. 68.45 per cent. of those employed in miscellaneous occupations working in July were unemployed in February. 67.77 per cent. of the

painters and paperhangers working in May were unemployed in January. 34.76 per cent. of the plumbers and 57.25 per cent. of all persons working in June were not working in February. See table as follows.

SUMMARY OF THE PERSONS EMPLOYED BY MONTHS.

Months.	Carpenters.	General contractors.	Masons and plasterers.	Miscellaneous	Painters and paperhangers.	Plumbers.	Total.
January	624	246	226	402	226	553	2,276
February	620	245	206	354	248	518	2,191
March	732	281	328	333	355	538	2,617
April	812	515	601	405	593	672	3,598
May	921	720	762	812	698	751	4,664
June	956	829	819	1,067	660	794	5,125
July	936	871	865	1,122	454	734	5,032
August	989	914	826	975	423	791	4,918
September	947	880	867	935	457	733	4,869
October	936	840	816	875	466	725	4,658
November	826	722	615	648	356	703	3,870
December	686	462	416	412	277	651	2,904
Average	836	627	612	699	434	634	3,892
Per cent. .	21.48	16.11	15.72	17.96	11.15	17.58	100.00

SUMMARY OF THE RANGE OF EMPLOYMENT BY MONTHS.

Months.	Carpenters.	General contractors.	Masons and plasterers.	Miscellaneous.	Painters and paperhangers.	Plumbers.	Total.
January	63.29	26.91	26.07	35.83	32.23	69.66	44.41
February	62.88	26.81	23.76	31.55	35.53	65.24	42.75
March	74.24	30.74	37.83	34.13	50.89	67.76	51.06
April	82.35	56.35	69.32	36.10	87.53	84.63	70.20
May	93.41	78.77	87.89	72.37	100.00	94.58	91.00
June	96.96	90.70	94.46	95.10	94.56	100.00	100.00
July	99.40	95.30	99.77	100.00	65.04	82.44	98.11
August	100.00	100.00	95.27	86.89	60.60	99.60	95.96
September	96.06	96.23	100.00	83.33	66.47	98.61	95.00
October	94.93	91.90	94.12	77.99	66.76	91.31	90.89
November	83.77	78.99	70.93	57.75	51.00	88.54	73.56
December	69.58	50.55	47.93	36.72	39.69	81.99	56.66
Average	84.77	68.61	70.62	62.31	62.44	86.20	75.80

SUMMARIES OF THE RANGE OF UNEMPLOYMENT, BY MONTHS.

Months.	Carpenters.	General contractors.	Masons and plasterers.	Miscellaneous.	Painters and paper hangers.	Plumbers.	Total.
January	36.71	73.09	73.93	64.17	67.77	30.35	65.59
February	37.12	73.19	76.24	68.45	64.47	34.76	57.25
March	26.76	69.26	62.17	65.87	49.11	32.24	48.94
April	17.65	43.65	30.68	63.90	12.47	15.37	29.80
May	6.59	21.23	12.11	27.63	.00	6.42	9.00
June	3.04	9.30	5.54	4.90	5.40	.00	1.89
July .....	.20	4.70	.23	.00	34.96	5.67	4.04
August			4.73	13.11	39.40	.40	5.00
September	3.95	3.72	.00	16.67	34.53	1.39	9.11
October	5.07	8.10	5.88	22.01	33.34	8.67	26.44
November	16.23	21.01	29.07	42.25	49.00	11.46	63.34
December	30.42	49.45	52.02	63.28	60.31	18.01	
Average	13.23	31.39	29.38	37.69	37.56	13.80	24.20

Table III exhibits "by months, the number and per cent. of the hours of labor per day" for each industry. In general, more laborers work eight hours for a day's work in winter than in summer. In the case of carpenters, this is true both winter and summer. An average of 465 or 55.62 per cent. work eight hours for a day's work, 109 or 13.04 per cent. work nine hours for a day's work, and 262, or 31.34 per cent. work ten hours for a day's work throughout the year.

More general contractors work eight hours for a day's work in winter than in summer. On an average 471, or 77.21 per cent. of the total averages, work 10 hours for a day's work, while only 55 or 9.02 per cent. work 8 hours, and 84 or 13.77 per cent. work nine hours for a day.

Among the masons and plasterers, the number was more evenly divided between those working ten and those working eight hours per day. An average of 268 or 43.79 per cent. worked eight hours and 265 or 43.31 per cent. worked ten hours for a day's work, while only 79, or 12.90 per cent. worked nine hours.

Under miscellaneous occupations the numbers varied more widely. In every month of the year more men worked ten hours for a day's work than either eight or nine. An average of 563 or 80.55 per cent. of the whole number, worked ten hours throughout the year, while only 63, or 9.01 per cent. worked eight hours, and 73 or 10.44 per cent. worked nine hours.

Practically all in these trades work ten hours per day in July. It seems as if the element of skill might enter into even the number of hours men work for a day.

The table exhibits just the opposite tendency among the painters and paperhangers. A great majority worked eight hours throughout the year. An average of 335, or 77.37 per cent. worked eight hours a day while only 19, or 4.39 per cent. worked nine hours and 79, or 18.24 per cent. worked ten hours for a day.

The Summary shows that in Nov., Dec., Jan., Feb. and March most of the laborers in the six skilled trades worked eight hours for a day's work while during the remainder of the year the greatest number worked ten hours. On an average 1,926, or 49.37 per cent. worked ten hours, 480, or 12.31 per cent. worked nine hours, and 1,495, or 38.32 per cent. worked eight hours for a day's work. The following is the table:

CARPENTERS.

Giving, by Months, the Number and Per cent. of the Hours of Labor per Day.

MONTHS.	HOURS OF LABOR PER DAY.							
	Number.				Per Cent.			
	8 hours or less.	9 hours.	10 hours.	Total per- sons.	8 hours or less.	9 hours.	10 hours.	Total
January	488	25	111	624	78.20	4.01	17.79	100.00
February	517	40	63	620	83.39	6.45	10.16	100.00
March	453	85	194	732	61.89	11.61	26.50	100.00
April	451	82	279	812	55.54	10.10	34.36	100.00
May	431	130	360	921	46.80	14.11	39.09	100.00
June	422	146	388	956	44.14	15.27	40.59	100.00
July	467	151	368	986	47.36	15.31	37.33	100.00
August	457	141	391	989	46.21	14.26	39.53	100.00
September	446	133	368	947	47.10	14.04	38.86	100.00
October	462	176	298	936	49.36	18.80	31.84	100.00
November	512	113	201	826	61.99	13.68	24.33	100.00
December	478	90	117	685	69.78	13.14	17.08	100.00
Average	465	109	262	836	55.62	13.04	31.34	100.00

GENERAL CONTRACTORS.

Giving, by Months, the Number and Per cent. of the Hours of Labor per Day.

MONTHS.	HOURS OF LABOR PER DAY.							
	Number.				Per Cent.			
	8 hours or less.	9 hours.	10 hours.	Total pers- ons.	8 hours or less.	9 hours.	10 hours.	Total.
January	112	74	60	246	45.53	30.08	24.39	100.00
February	99	77	69	245	40.41	31.43	28.16	100.00
March	64	48	169	281	22.78	17.08	60.14	100.00
April	22	28	465	515	4.27	5.44	90.29	100.00
May	22	15	683	720	3.06	2.08	94.86	100.00
June	30	16	783	829	3.62	1.93	94.45	100.00
July	20	13	838	871	2.30	1.49	96.21	100.00
August	20	18	976	914	1.97	1.78	96.25	100.00
September	30	22	828	880	3.41	2.50	94.09	100.00
October	39	75	726	840	4.64	8.93	86.43	100.00
November	51	397	274	722	7.06	54.99	37.95	100.00
December	152	225	85	462	32.90	48.70	18.40	100.00
Average	65	84	471	610	9.02	13.77	77.21	100.00

MASONS AND PLASTERERS.

Giving, by Months, the Number and Per cent. of the Hours of Labor per Day.

MONTHS.	HOURS OF LABOR PER DAY.							
	Number.				Per Cent.			
	8 hours or less.	9 hours.	10 hours.	Total pers- ons.	8 hours or less.	9 hours.	10 hours.	Total.
January	141	43	42	226	62.39	19.03	18.58	100.00
February	140	25	41	206	67.96	12.15	19.90	100.00
March	206	33	89	328	62.81	10.06	27.13	100.00
April	294	44	263	601	48.92	7.32	43.76	100.00
May	318	74	370	762	41.73	9.71	48.56	100.00
June	293	90	436	819	35.78	10.99	53.23	100.00
July	357	94	414	865	41.27	10.87	47.86	100.00
August	320	109	397	826	38.74	13.20	48.06	100.00
September	305	143	419	867	35.18	16.49	48.33	100.00
October	320	128	368	816	39.22	15.69	45.09	100.00
November	260	131	224	615	42.28	21.39	36.42	100.00
December	261	33	122	416	62.74	7.93	29.33	100.00
Average	268	79	265	612	43.79	12.90	43.31	100.00

MISCELLANEOUS.

Giving, by Months, the Number and Per cent. of the Hours of Labor per Day.

MONTHS.	HOURS OF LABOR PER DAY.							
	Number.				Per Cent.			
	8 hours or less.	9 hours.	10 hours.	Total hours.	8 hours or less.	9 hours.	10 hours.	Total.
January	72	151	179	402	17.91	37.56	44.53	100.00
February	74	114	166	354	20.91	32.20	46.89	100.00
March	64	100	219	383	16.71	26.11	57.18	100.00
April	60	40	306	406	14.81	9.88	75.31	100.00
May	55	27	730	812	6.77	3.33	89.90	100.00
June	55	31	981	1,067	5.15	2.91	91.94	100.00
July	58	30	1,034	1,122	5.17	2.67	92.16	100.00
August	56	24	895	975	5.74	2.46	91.80	100.00
September	54	23	858	935	5.78	2.46	91.76	100.00
October	56	64	755	875	6.40	7.31	86.29	100.00
November	72	149	427	648	11.11	22.99	65.90	100.00
December	84	126	202	412	20.39	30.58	49.03	100.00
Average	63	73	563	699	9.01	10.44	80.55	100.00

PAINTING AND PAPERHANGING.

Giving, by Months, the Number and Per cent. of the Hours of Labor per Day.

MONTHS.	HOURS OF LABOR PER DAY.							
	Number.				Per Cent.			
	8 hours or less.	9 hours.	10 hours.	Total hours.	8 hours or less.	9 hours.	10 hours.	Total.
January	209	.....	16	225	92.89	.....	7.11	100.00
February	224	5	19	248	90.32	2.02	7.66	100.00
March	207	16	32	255	81.18	6.28	12.54	100.00
April	446	28	119	593	75.21	4.72	20.07	100.00
May	478	65	155	698	68.48	9.31	22.21	100.00
June	448	15	197	660	67.88	2.27	29.85	100.00
July	322	12	120	454	70.93	2.64	26.43	100.00
August	360	12	111	423	70.92	2.84	26.24	100.00
September	346	12	99	457	75.71	2.63	21.66	100.00
October	372	38	56	466	79.83	8.15	12.02	100.00
November	303	26	27	356	85.11	7.30	7.59	100.00
December	262	3	12	277	94.59	1.08	4.33	100.00
Average	335	19	79	433	77.37	4.39	18.24	100.00

PLUMBERS.

Giving, by Months, the Number and Per cent. of the Hours of Labor per Day.

MONTHS.	HOURS OF LABOR PER DAY.							
	Number.				Per Cent.			
	8 hours or less.	9 hours.	10 hours.	Total hours	8 hours or less.	9 hours.	10 hours.	Total.
January	315	77	161	553	56.96	13.92	29.12	100.00
February	287	79	152	518	55.41	15.25	29.34	100.00
March	265	88	185	538	49.26	16.36	34.38	100.00
April	299	112	261	672	44.49	16.67	38.84	100.00
May	309	140	302	751	41.15	18.64	40.21	100.00
June	320	152	322	794	40.30	19.14	40.56	100.00
July	288	132	314	734	39.24	17.93	42.78	100.00
August	341	106	344	791	43.11	13.40	43.49	100.00
September	321	125	337	783	41.00	15.96	43.04	100.00
October	229	130	306	725	39.86	17.93	42.21	100.00
November	340	159	234	703	48.36	18.35	33.29	100.00
December	330	122	199	651	50.69	18.74	30.57	100.00
Average	309	116	260	685	45.11	16.93	37.96	100.00

SUMMARY.

Giving, by Months, the Number and Per cent. of the Hours of Labor per Day.

MONTHS.	HOURS OF LABOR PER DAY.							
	Number.				Per Cent.			
	8 hours or less.	9 hours.	10 hours.	Total hours.	8 hours or less.	9 hours.	10 hours.	Total.
January ..	1,337	370	569	2,276	58.74	16.26	25.00	100.00
February ..	1,341	340	510	2,191	61.20	15.52	23.28	100.00
March	1,359	370	888	2,617	51.93	14.14	33.93	100.00
April ...	16372	334	1,632	3,138	43.69	9.28	47.03	100.00
May	1,613	451	2,606	4,664	34.58	9.67	55.75	100.00
June	1,568	450	3,107	5,125	30.60	8.78	60.62	100.00
July	1,512	432	3,088	5,032	30.05	8.58	61.37	100.00
August	1,494	410	3,114	5,018	29.77	8.17	62.06	100.00
September ..	1,502	458	2,909	4,869	30.85	9.41	59.74	100.00
October	1,538	611	2,509	4,658	33.02	13.12	53.86	100.00
November ..	1,538	945	1,387	3,870	39.74	24.42	35.84	100.00
December ..	1,568	599	737	2,904	53.99	20.63	25.38	100.00
Average	1,495	480	1,926	3,901	38.32	12.31	49.37	100.00

Table IV shows the frequency of paying wages, whether monthly, semimonthly, or weekly. An average of 589 carpenters, or 70.51 per cent. of the whole number, were paid every two weeks; 230, or 27.51 per cent. every week, while only 17, or 2.04 per cent. were paid once a month. The percentage of those paid weekly in summer was greater than in winter while the opposite is true in the case of semi-weekly payments; the former varied about 11 per cent, and the latter about 13 per cent. In the list of monthly payments the variation is less than $2\frac{1}{2}$ per cent.

General contractors did not pay monthly wages in winter and not to exceed 3.75 per cent. of the total wages in summer. A greater per cent. of weekly wages was paid in winter than in summer while the opposite is true with semi-monthly wages. The former varied about $20\frac{1}{2}$ per cent. and the latter about $19\frac{1}{2}$ per cent. This is in direct contrast with the carpenters. An average of 308 general contractors, or 49.12 per cent. of the total average, received their wages weekly, and the same number and per cent. received their wages semi-monthly; but only an average of 11 or 1.76 per cent. received their wages monthly.

No masons and plasterers received monthly wages, while 140, or 22.88 per cent. of the whole received weekly wages and 472, or 77.12 per cent. semi-monthly wages. A greater per cent. received weekly wages in summer than winter and the opposite was true in regard to semi-monthly wages. The former varied 9.68 per cent. and the latter the same.

An average of 505, or 72.25 per cent. of the persons working in the miscellaneous occupations, received weekly wages; 141, or 20.17 per cent. received semi-monthly wages; and 53, or 7.58 per cent. received monthly wages. A greater per cent. received weekly wages in summer than in winter, while the opposite is true with those receiving semi-monthly and monthly wages.

The same general characteristics hold for the painters and paperhangers as for the miscellaneous occupations. An average of 177, or 70.29 per cent. of the whole, received weekly wages, 71, or 28.29 per cent. semi-monthly, and only 3, or 1.19 per cent. received monthly wages.

In case of the plumbers, none received monthly wages while

on an average of over 90 per cent. received weekly wages; and less than 10 per cent. were paid semi-monthly. The regular variations between the wages paid in winter and those of summer that appeared in the other skilled trades did not appear in this one. The number that received weekly, or semi-monthly wages in June, is about the same in December. Throughout the whole year the number did not vary in either case 6.71 per cent.

A general survey of all six of the skilled trades is exhibited in the summary of this table. On the whole, the summary brings out the same characteristics as the plumbers, except that the per cent. of difference between those who received weekly and semi-monthly wages was not so marked. The summary also contains a small per cent. that received monthly wages while the plumber's contains none. The per cent. of weekly or semi-monthly wages did not vary over 5.22 per cent. during the whole year, while the monthly wages varied less than $1\frac{3}{4}$ per cent. On an average, 1,980, or 53.37 per cent. of all wage earners, received their wages weekly, 1,645, or 44.34 per cent. semi-monthly, and 85, or 2.29 per cent. monthly.

Following this summary is a table showing how often *establishments* pay wages. The trades of masons and plasterers, and plumbers made no monthly payments, while only one establishment in each of the trades of general contractors, and painters and paperhangers paid monthly wages, four establishments under the head of miscellaneous occupations paid monthly, and three carpentry establishments paid monthly. This makes a total of only nine, or 1.51 per cent. of the whole number. On the other hand 378, or 63.42 per cent. paid weekly, and 209, or 35.07 per cent. paid semi-monthly. It will be noticed that the percentages of establishments which paid weekly or semi-monthly payments do not correspond with the percentage of persons who received such payments. This probably means that the large establishments employing a large number of hands do not go to the extra trouble of paying every week. The tables above referred to are as follows:

CARPENTERS.

Showing the Number and Per cent. of Persons Who Received Their Wages Weekly, Semi-monthly, and Monthly.

MONTHS.	NUMBER OF PERSONS.				PER CENT. OF PERSONS.			
	Week-ly.	Semi-month-ly.	Month-ly.	Total.	Week-ly.	Semi-month-ly.	Month-ly.	Total.
January	122	494	8	624	19.55	79.17	1.28	100.00
February	121	494	2	617	19.61	80.07	.32	100.00
March	197	523	10	730	26.99	71.64	1.37	100.00
April	241	555	16	812	29.68	68.35	1.97	100.00
May	272	628	21	921	29.53	68.19	2.28	100.00
June	278	653	25	956	29.08	68.31	2.61	100.00
July	302	668	26	996	30.63	66.73	2.64	100.00
August	293	668	27	989	29.63	67.64	2.73	100.00
September	268	656	23	947	28.30	69.27	2.43	100.00
October	270	647	19	936	28.85	69.12	2.03	100.00
November	248	561	17	826	30.02	67.92	2.06	100.00
December	151	524	11	686	22.01	76.39	1.06	100.00
Average	230	589	17	836	27.51	70.45	2.04	100.00

GENERAL CONTRACTORS.

Showing the Number and Per cent. of Persons Who Received Their Wages Weekly, Semi-weekly, and Monthly.

MONTHS.	NUMBER OF PERSONS.				PER CENT. OF PERSONS.			
	Week-ly.	Semi-month-ly.	Month-ly.	Total.	Week-ly.	Semi-month-ly.	Month-ly.	Total.
January	163	83	.....	246	66.26	33.74	.....	100.00
February	162	83	.....	245	66.12	33.88	.....	100.00
March	143	138	.....	281	50.89	49.11	.....	100.00
April	250	254	.....	515	48.54	49.32	2.14	100.00
May	358	335	27	720	49.72	46.53	3.75	100.00
June	387	418	24	829	46.68	50.42	2.90	100.00
July	413	433	25	871	47.42	49.71	2.87	100.00
August	422	473	19	914	46.17	51.75	2.08	100.00
September	404	464	12	880	45.91	52.73	1.36	100.00
October	384	448	8	840	45.72	53.33	.95	100.00
November	346	368	8	722	47.92	50.97	1.11	100.00
December	266	196	.....	462	57.53	42.42	.....	100.00
Average	308	308	11	627	49.12	49.12	1.76	100.00

MASONS AND PLASTERERS.

Showing the Number and Per cent. of Persons Who Received Their Wages Weekly, Semi-monthly, and Monthly.

MONTHS.	NUMBER OF PERSONS.				PER CENT. OF PERSONS.			
	Week-ly.	Semi-month-ly.	Month-ly.	Total.	Week-ly.	Semi-month-ly.	Month-ly.	Total.
January	45	181	.....	226	19.91	80.09	.....	100.00
February	44	162	.....	206	21.36	78.64	.....	100.00
March	73	255	.....	328	22.26	77.74	.....	100.00
April	151	450	.....	601	25.12	74.88	.....	100.00
May	192	570	.....	762	25.20	74.80	.....	100.00
June	221	598	.....	819	26.99	73.01	.....	100.00
July	190	675	.....	865	21.97	78.03	.....	100.00
August	188	638	.....	826	22.76	77.24	.....	100.00
September	214	653	.....	867	24.68	75.32	.....	100.00
October	177	639	.....	816	21.69	78.31	.....	100.00
November	114	501	.....	615	18.54	81.46	.....	100.00
December	72	344	.....	416	17.31	82.69	.....	100.00
Average	140	472	.....	612	22.88	77.12	.....	100.00

MISCELLANEOUS.

Showing the Number and Per cent. of Persons Who Received Their Wages Weekly, Semi-weekly, and Monthly.

MONTHS.	NUMBER OF PERSONS.				PER CENT. OF PERSONS.			
	Week-ly.	Semi-month-ly.	Month-ly.	Total.	Week-ly.	Semi-month-ly.	Month-ly.	Total.
January	256	104	42	402	63.68	25.87	10.45	100.00
February	253	61	40	354	71.47	17.23	11.30	100.00
March	246	95	42	383	64.23	24.80	10.97	100.00
April	263	116	26	405	64.94	28.64	6.42	100.00
May	601	154	57	812	74.01	18.97	7.02	100.00
June	828	162	77	1,067	77.60	15.13	7.22	100.00
July	838	196	88	1,122	74.69	17.47	7.84	100.00
August	701	187	87	975	71.90	19.18	8.92	100.00
September	683	195	57	935	73.15	20.86	6.09	100.00
October	636	190	49	875	72.69	21.71	5.60	100.00
November	464	133	51	648	71.60	20.53	7.87	100.00
December	291	100	21	412	70.63	24.27	5.10	100.00
Average ...	505	141	53	699	72.25	20.17	7.58	100.00

PAINTING AND PAPER-HANGING.

Showing the Number and Per cent. of Persons Who Received Their Wages Weekly, Semi-monthly, and Monthly.

MONTHS.	NUMBER OF PERSONS.				PER CENT. OF PERSONS.			
	Week-ly.	Semi-month-ly.	Month-ly.	Total.	Week-ly.	Semi-month-ly.	Month-ly.	Total.
January	88	46	3	137	64.23	33.58	2.19	100.00
February	93	51	3	147	63.27	34.69	2.04	100.00
March	132	68	3	203	65.02	33.50	1.48	100.00
April	245	89	3	337	72.70	26.41	.89	100.00
May	289	106	3	398	72.61	26.64	.75	100.00
June	278	101	3	382	72.77	26.44	.79	100.00
July	196	73	3	272	72.06	26.84	1.10	100.00
August	181	62	5	248	72.98	25.00	2.02	100.00
September	182	70	3	255	71.37	27.45	1.18	100.00
October	208	71	3	282	73.75	25.18	1.06	100.00
November	131	63	3	197	66.50	31.98	1.52	100.00
December	97	56	3	156	62.58	35.48	1.94	100.00
Average	177	71	3	251	70.52	28.29	1.19	100.00

PLUMBERS.

Showing the Number and Per cent. of Persons Who Received Their Wages Weekly, Semi-monthly, and Monthly.

MONTHS.	NUMBER OF PERSONS.				PER CENT. OF PERSONS.			
	Week-ly.	Semi-month-ly.	Month-ly.	Total.	Week-ly.	Semi-month-ly.	Month-ly.	Total.
January	506	48	.....	553	91.32	8.68	.....	100.00
February	478	40	.....	518	92.28	7.72	.....	100.00
March	497	41	.....	538	92.38	7.62	.....	100.00
April	618	54	.....	672	91.96	8.04	.....	100.00
May	696	55	.....	751	92.68	7.32	.....	100.00
June	731	63	.....	794	92.06	7.94	.....	100.00
July	672	62	.....	734	91.55	8.45	.....	100.00
August	680	111	.....	791	86.97	14.03	.....	100.00
September	683	100	.....	783	87.23	12.77	.....	100.00
October	645	80	.....	725	88.96	11.04	.....	100.00
November	634	69	.....	703	90.19	9.81	.....	100.00
December	603	48	.....	651	92.63	7.37	.....	100.00
Average	620	64	.....	684	90.65	9.35	.....	100.00

SUMMARY.

Showing the Number and Per cent. of Persons Who Received Their Wages Weekly, Semi-monthly, and Monthly.

MONTHS.	NUMBER OF PERSONS.				PER CENT. OF PERSONS.			
	Week-ly.	Semi-month-ly.	Month-ly.	Total.	Week-ly.	Semi-month-ly.	Month-ly.	Total.
January	1,179	956	53	2,188	53.88	43.70	2.42	100.00
February	1,151	891	45	2,087	55.15	42.69	2.16	100.00
March	1,288	1,122	55	2,465	52.25	46.52	2.23	100.00
April	1,768	1,518	66	3,342	52.90	45.42	1.68	100.00
May	2,408	1,848	108	4,364	55.18	42.35	2.47	100.00
June	2,723	1,995	129	4,847	56.18	41.16	2.66	100.00
July	2,611	2,097	142	4,850	53.83	43.24	2.93	100.00
August	2,465	2,140	138	4,743	51.97	45.12	2.91	100.00
September	2,434	2,138	95	4,667	52.15	45.81	2.04	100.00
October	2,320	2,075	79	4,474	51.86	46.38	1.76	100.00
November	1,937	1,695	79	3,711	52.20	46.67	2.13	100.00
December	1,480	1,267	35	2,782	53.20	45.64	1.26	100.00
Average	1,980	1,645	85	3,710	53.37	44.34	2.29	100.00

TABLE SHOWING THE NUMBER OF ESTABLISHMENTS WHICH PAID WEEKLY, MONTHLY, OR SEMI-MONTHLY WAGES.

ESTABLISHMENTS.	NUMBER OF ESTABLISHMENT				PER CENT. OF ESTABLISHMENTS			
	Week-ly.	Semi-month-ly.	Month-ly.	Total.	Week-ly.	Semi-month-ly.	Month-ly.	Total.
Carpenters	53	83	3	139	38.13	59.71	2.16	100.00
Gen'l Contractors ..	46	30	1	77	59.74	38.96	1.30	100.00
Masons, Plasterers ..	21	64	.....	85	24.71	75.29	.....	100.00
Miscellaneous	74	11	4	89	83.15	12.36	4.49	100.00
Painting, Paper H'g ..	83	14	1	98	84.69	14.29	1.02	100.00
Plumbers	101	7	.....	108	93.52	6.48	.....	100.00
Total	378	209	9	596	63.42	35.07	1.51	100.00

Table V shows the "number and per cent." of persons "who received their wages in cash, checks and cash and checks." On the average each industry paid more of their men in cash than in any other way, varying from 48.49 per cent. to 88.25 per cent. of the number employed, while the number paid in "cash and checks" vary from 4.72 per cent. to 11.27 per cent. This leaves the percentage of those paid in checks ranging from 4.15 per cent. to 40.19 per cent.

While the number of men working at the carpenter's trade varied from 614 in January to 986 in July, the per cent. of those paid in cash varied only from 54.70 per cent. in October to 64.23 per cent. in August; the per cent. of those paid in checks varied from 28.12 per cent. in August to 37.70 per cent. in September, and, of those paid in cash and checks varied from 3.75 per cent. in January, to 7.80 per cent. in October. The averages show that 497, or 60.09 per cent. of the whole were paid in cash; 277, or 33.50 per cent. were paid in checks; and 53, or 6.41 per cent. in cash and checks.

The whole number of general contractors paid wages varied from 245 in February to 914 in August, while the percentages of those paid in *cash* varied from 40.03 per cent. in November to 56.91 per cent. in January, those paid in *checks* from 36.53 per cent. in May to 45.57 per cent. in November, and those paid in cash and checks, from 6.50 per cent. in January to 14.93 per cent. in December. On the average 304, or 48.49 per cent. of the whole number, received their wages in cash, 252, or 40.19 per cent. in checks, and 71, or 11.32 per cent. in cash and checks.

The number of masons and plasterers who received wages varied from 206 in February to 869 in July. The percentages of those who received cash varied from 51.06 in November to 72.82 in February, those who received checks, from 23.33 in February to 41.46 in November, and those who received both cash and checks, from 3.99 in January to 18.13 in April. Of the whole number who received wages 55.07 per cent. or 337, were paid in cash, 33.66 per cent. or 206 in checks; and 11.27 per cent. or 69, in both cash and checks.

The total number of men that worked in the miscellaneous occupations who received wages varied from 354 in February to 1,122 in July. The percentages of those paid in cash varied from 69.90 in January to 88.00 in June; those who received checks, from 9.19 in June to 23.63 in January; those who received both cash and checks, from 2.81 in June to 8.49 in November. An average of 576, or 82.40 per cent. of the total were paid in cash, 90, or 12.88 per cent. were paid in checks, 33, or 4.72 per cent. were paid in both cash and checks.

The total number of painters and paperhangers who received wages during any one month varied from 225 in January to 698 in May. The percentages of those paid in cash varied from 85.58 in August to 91.13 in February; those paid in checks from 2.82 in February to 5.51 in July; and those paid in cash and checks, from 5.35 in March to 9.93 in August. This was the only industry that paid more men in both cash and checks than in checks alone. An average of 383, or 88.25 per cent of the total average, received their wages in cash, 18, or 4.15 per cent. received wages in checks, and 33, or 7.60 per cent. received their wages in both cash and checks.

The total number of plumbers who received wages during the year varied from 518 in February to 794 in June. The percentages of those who received cash varied from 68.96 in March to 74.43 in May; of those who received their wages in checks, from 15.41 in July to 19.47 in August; and those who were paid in both cash and checks varied from 19.45 per cent. in September to 12.82 in March. The average number who received cash wages during the year was 492, or 71.93 per cent. of the total average. Those paid in checks averaged 121, or 17.69 per cent. of the total, and those paid in both cash and checks averaged 71, or 10.38 per cent. of the total average of 684.

The summary for all industries exhibits about the same general characteristics as each industry. The number of men paid during the year varied from 2,191 in February to 5,125 in June, the number gradually increased from the former to the latter, then decreased again with the same regularity to the former. The percentages, on the other hand, did not rise and fall in the same way. 61.21 per cent. of those who worked in June were paid in cash, while 70.29 per cent. who worked in February were paid in the same way. The percentages paid in checks varied from 22.32 in February to 28.58 in November, and those paid in both cash and checks varied from 6.75 in January to 9.53 in November. A total average of 2,589, or 66.52 per cent. of the total average working during the year, received their wages in cash, those paid in checks averaged 971, or 24.94 per

cent. of the whole, and those paid in both cash and checks numbered 332, or 8.54 per cent. of the whole.

It will be noticed by comparing the totals for each summary that they do not correspond with one another. To illustrate, none of the totals in the summary showing the number paid "weekly, semi-monthly or monthly," correspond in a single instance with the totals in the summary showing "whether paid in cash, checks, and cash and checks. Nor do the totals for one industry correspond with the totals for the same industry in another place. The discrepancy in any case arises from the fact that in some instances those making their reports to this office answered questions bearing upon one or the other of these topics and failed to answer them in other instances. Nevertheless the exhibits as they stand are approximately correct. The following is the table above discussed:

CARPENTERS.

Showing the Number and Per cent. of Carpenters Who Received their Wages in Cash, Checks, and in both Cash and Checks.

MONTHS.	NUMBER OF PERSONS.				PER CENT. OF PERSONS.			
	Cash.	Checks	Cash and checks.	Total.	Cash.	Checks	Cash and checks.	Total.
January	391	200	23	614	63.68	32.57	3.75	100.00
February	391	261	28	620	63.06	32.42	4.52	100.00
March	443	245	44	732	60.52	23.47	6.01	100.00
April	504	267	41	812	62.07	32.88	5.05	100.00
May	545	318	58	921	59.17	34.63	6.30	100.00
June	605	287	64	956	63.29	30.02	6.69	100.00
July	598	313	75	986	60.65	31.74	7.61	100.00
August	571	250	68	889	64.23	28.12	7.65	100.00
September	526	257	64	947	57.54	37.70	6.76	100.00
October	512	351	73	936	54.70	37.50	7.80	100.00
November	465	301	60	826	56.30	36.44	7.26	100.00
December	414	230	42	686	60.35	33.53	6.12	100.00
Average	497	277	53	827	60.09	33.50	6.41	100.00

GENERAL CONTRACTORS.

Showing the Number and Per cent. of General Contractors who Received their Wages in Cash, Checks, and both Cash and Checks.

MONTHS.	NUMBER OF PERSONS.				PER CENT. OF PERSONS.			
	Cash.	Checks	Cash and checks.	Total.	Cash.	Checks	Cash and checks.	Total.
January	140	90	16	246	56.91	36.59	6.50	100.00
February	132	94	19	245	53.88	38.37	7.75	100.00
March	139	113	29	281	49.47	40.21	10.32	100.00
April	277	189	49	515	53.79	36.70	9.51	100.00
May	374	263	83	720	51.94	36.53	11.53	100.00
June	409	329	91	829	49.34	39.69	10.97	100.00
July	422	359	90	871	48.45	41.22	10.33	100.00
August	471	337	106	914	51.53	36.87	11.60	100.00
September	419	361	100	880	47.61	41.02	11.37	100.00
October	391	347	102	840	46.56	41.31	12.14	100.00
November	289	329	104	722	40.03	45.57	14.40	100.00
December	185	208	69	462	40.05	45.02	14.93	100.00
Average	304	252	71	627	48.49	40.19	11.32	100.00

MASONS AND PLASTERERS.

Showing the Number and Per cent. of Masons and Plasterers who received their Wages in Cash, Checks, and both Cash and Checks.

MONTHS-	NUMBER OF PERSONS.				PER CENT. OF PERSONS.			
	Cash.	Checks	Cash and checks.	Total.	Cash.	Checks	Cash and checks.	Total.
January	143	74	9	226	63.27	32.74	3.99	100.00
February	150	46	10	206	72.82	22.33	4.85	100.00
March	178	101	49	328	54.27	30.79	14.94	100.00
April	325	167	109	601	54.08	27.79	18.13	100.00
May	415	236	111	762	54.46	30.97	14.57	100.00
June	420	232	107	819	51.28	35.65	13.07	100.00
July	478	300	91	869	55.01	34.52	10.47	100.00
August	463	271	92	826	56.06	32.81	11.14	100.00
September	481	301	85	867	55.48	34.72	9.80	100.00
October	441	287	88	816	54.06	35.17	10.78	100.00
November	314	265	46	615	51.06	41.46	7.48	100.00
December	241	142	33	416	57.94	34.13	7.93	100.00
Average	337	206	69	612	55.07	33.66	11.27	100.00

MISCELLANEOUS.

Showing the Number and Per cent. of Persons in the Miscellaneous Occupations who Received their Wages in Cash, Checks, and Cash and Checks.

MONTHS.	NUMBER OF PERSONS.				PER CENT. OF PERSONS.			
	Cash.	Checks	Cash and checks.	Total.	Cash.	Checks	Cash and checks.	Total.
January	281	95	26	402	69.90	23.63	6.47	100.00
February	274	55	25	354	77.40	15.54	7.06	100.00
March	286	67	30	383	74.67	17.49	7.84	100.00
April	309	71	25	405	76.30	17.54	6.16	100.00
May	690	93	29	812	84.98	11.45	3.57	100.00
June	939	98	30	1,067	88.00	9.19	2.81	100.00
July	954	129	39	1,122	85.03	11.49	3.48	100.00
August	819	112	44	975	84.00	11.49	4.51	100.00
September	788	104	43	935	84.28	11.12	4.60	100.00
October	739	101	35	875	84.46	11.54	4.00	100.00
November	509	84	55	648	78.55	12.96	8.49	100.00
December	322	70	20	412	78.16	16.99	4.85	100.00
Average	576	90	33	699	82.40	12.88	4.72	100.00

PAINTING AND PAPERHANGING.

Showing the Number and Per cent. of Painters and Paperhangers who Received their Wages in Cash, Checks, and Cash and Checks.

MONTHS.	NUMBER OF PERSONS.				PER CENT. OF PERSONS.			
	Cash.	Checks	Cash and checks.	Total.	Cash.	Checks	Cash and checks.	Total.
January	205	7	13	225	91.11	3.11	5.78	100.00
February	226	7	15	248	91.13	2.82	6.05	100.00
March	320	16	19	355	90.14	4.51	5.35	100.00
April	520	25	48	593	87.69	4.22	8.09	100.00
May	613	32	53	698	87.82	4.59	7.59	100.00
June	587	29	44	660	88.94	4.39	6.67	100.00
July	396	25	33	454	87.22	5.51	7.27	100.00
August	362	19	42	423	85.58	4.49	9.93	100.00
September	397	19	41	457	86.87	4.16	8.97	100.00
October	412	18	36	466	88.41	3.86	7.73	100.00
November	310	11	35	356	87.08	3.09	9.83	100.00
December	247	9	21	277	89.17	3.25	7.58	100.00
Average	383	18	33	434	88.25	4.15	7.60	100.00

LABOR AND WAGES IN SIX SKILLED INDUSTRIES. 915

PLUMBERS.

Showing the Number and Per cent. of Plumbers who Received their Wages in Cash, Checks, and in both Cash and Checks.

MONTHS.	NUMBER OF PERSONS.				PER CENT. OF PERSONS.			
	Cash.	Checks	Cash and checks.	Total.	Cash.	Checks	Cash and checks.	Total.
January	388	99	66	553	70.16	17.90	11.94	100.00
February	367	86	65	518	70.85	16.60	12.55	100.00
March	371	98	69	538	68.96	18.22	12.82	100.00
April	487	121	64	672	72.47	18.01	9.52	100.00
May	569	118	74	751	74.43	15.71	9.86	100.00
June	587	130	77	794	73.93	16.37	9.70	100.00
July	544	113	77	734	74.11	16.41	10.48	100.00
August	557	154	80	791	70.42	19.47	10.11	100.00
September	569	160	74	783	71.39	19.16	9.45	100.00
October	522	132	71	725	72.00	18.21	9.79	100.00
November	508	126	69	703	72.26	17.92	9.82	100.00
December	461	122	68	651	70.81	18.74	10.45	100.00
Average	492	121	71	684	71.93	17.69	10.38	100.00

SUMMARY FOR ALL INDUSTRIES.

Showing the Number and Per cent. of all Persons who Received their Wages in Cash, Checks, and in both Cash and Checks.

MONTHS.	NUMBER OF PERSONS.				PER CENT. OF PERSONS.			
	Cash.	Checks	Cash and checks.	Total.	Cash.	Checks	Cash and checks.	Total.
January	1,548	565	153	2,266	68.31	24.94	6.75	100.00
February	1,540	489	162	2,191	70.29	22.32	7.39	100.00
March	1,737	640	240	2,617	66.37	24.46	9.17	100.00
April	2,422	840	336	3,598	67.32	23.36	9.33	100.00
May	3,196	1,060	468	4,664	68.53	22.72	8.75	100.00
June	3,547	1,165	413	5,125	61.21	22.73	8.06	100.00
July	3,388	1,239	405	5,032	67.33	24.62	8.06	100.00
August	3,243	1,243	432	4,918	65.94	25.27	8.79	100.00
September	3,170	1,292	407	4,869	65.11	26.54	8.35	100.00
October	3,017	1,236	405	4,658	64.77	26.53	8.70	100.00
November	2,395	1,106	369	3,870	61.89	28.58	9.53	100.00
December	1,870	781	253	2,904	64.40	26.89	8.71	100.00
Average ...	2,589	971	332	3,892	66.52	24.94	8.54	100.00

Table VI shows the total amount paid in wages for each industry and the total for all industries, the average number of men working in each, the total average, and also the average yearly earnings. General contractors, masons and plasterers, and plumbers received about the same yearly earnings. The average yearly earnings of carpenters, and painters and paperhangers are also about the same, while those working in the miscellaneous occupations fall nearly \$100 below the average and over \$156 below the highest average yearly wages. One reason for this is, as has been pointed out before, that there are undoubtedly more unskilled laborers in this class than in either of the others. The table is as follows:

SHOWING WAGES PAID IN EACH INDUSTRY, AVERAGE NUMBER OF MEN, AND THE AVERAGE WAGES PAID TO EACH.

INDUSTRIES.	TOTAL	AVERAGE	
	Amount paid in wages.	Number of men.	Yearly earnings.
Carpenters	\$376,173 27	836	\$449 97
General Contractors	332,565 77	627	530 41
Masons and Plasterers	309,362 47	612	505 50
Miscellaneous	261,489 98	699	374 10
Painting and Paperhanging	195,258 48	434	449 83
Plumbers	344,235 59	684	503 27
Totals	\$1,819,085.56	3,892	\$467 40

SALARIES AND WAGES IN CITIES AND VILLAGES.

The facts which are presented in the following pages under the above head relate to the earnings of a large number of persons who in one capacity or another are employed by the city and village corporations in this state. At the time of the last U. S. census, or in 1900, there were in Wisconsin 115 cities and 145 villages and their number is almost constantly increasing. But they are not only increasing numerically, but they are growing in size and importance. Their government is becoming more complex, and new functions are added from time to time. In order to carry on these governments or the duties devolving upon them a large staff of employes are needed. Each city has its officials and other employes, some of whom are elected by the people directly, others appointed by some one in authority, and still others who are employed in some other way. Nearly all of these receive compensation for their services in the form of salaries and wages, and as their number is quite large, constituting a considerable proportion of the wage-earning population, the amount of their earnings is of considerable importance. The purpose of this part is to show what these earnings are, or, in other words, to shed enough light upon them to enable comparisons between the earnings of those who are employed by municipal corporations on the one hand, and of those who are employed in private employments on the other.

The data for this purpose we endeavored to obtain through correspondence. Schedules were prepared and forwarded to each place. A few replied promptly; others did so after repeated appeals; but the majority paid no attention to our inquiries. The result of the whole effort was that we succeeded in obtaining replies from only 140 of the 250 places to which the schedules were sent. Nor were the replies, on the whole, satisfactory. While the schedule covered a great deal of ground the only points upon which fairly reliable data was obtained was the rate of the earnings or wages paid. The reason mostly given for

incomplete reports and for the failure to report was that the records of the city were kept in such shape that the facts desired could not be had without too much trouble, even if they could be had at all.

The data has been classified and presented with reference to occupations, as the nature of the duties performed. The first presentation in order relates to the earnings of the legal advisers of the cities, the city attorney.

CITY ATTORNEYS.

Yearly salary	No. of places.	Total.	Yearly salary.	No. of places.	Total.
\$1,300 per year	1	\$1,300 00	\$150 per year	3	\$450 00
1,200 per year	1	1,200 00	108 per year	1	108 00
500 per year	1	930 00	100 per year	9	900 00
600 per year	6	3,600 00	90 per year	1	90 00
500 per year	1	540 00	75 per year	2	150 00
500 per year	3	1,500 00	50 per year	5	100 00
480 per year	2	980 00	30 per year	2	60 00
400 per year	1	400 00	25 per year	1	25 00
300 per year	3	900 00			
200 per year	3	600 00	Total	47	\$14,129 00
175 per year	1	175 00	Average		300 60

The preceding presentation shows the yearly salary of 47 city attorneys. The salary of each is given separately, and in looking at the table it is seen that it varies from \$1,300 per year down to \$25. The highest amount was paid in one case only. Six cities each paid \$600 annually to their attorney, and three paid \$500. In nine cases the salary was only \$100 per year, while in 11 it was less than this amount. The average amount to each attorney was about \$300.60 per year.

The amounts thus given seem extremely low, the average being even below the earnings for common labor. It should be born in mind, however, that the larger cities in the state where the salaries are comparatively the highest did not report in these cases and are therefore not included, and that the attorneys included are only giving a part of their time to the duties for which the amounts given are received.

ENGINEERS.

Yearly salary.	No. of places.	Total.	Yearly salary.	No. of places.	Total.
\$1,400 per year	1	\$1,400 00	\$300 per year	1	\$300 00
1,300 per year	1	1,300 00	237 per year	1	237 00
1,200 per year	2	2,400 00	170 per year	1	170 00
1,000 per year	1	1,000 00	Total	15	\$11,647 00
700 per year	1	700 00	Average		776 00
600 per year	6	3,600 00			
540 per year	1	540 00			

Fifteen cities reported as to the salary of its city engineer and these reports are summarized in the above table. The salaries varied from \$1400 to \$170 per year, with an average of \$776 per year. Not many of the engineers included here gave their entire time to their official duties.

CITY AND VILLAGE CLERKS.

Yearly salary.	No. of places.	Total.	Yearly salaries.	No. of places.	Total.
\$1,700 per year	1	\$1,700 00	\$125 per year	5	\$625 00
1,000 per year	3	3,000 00	120 per year	2	240 00
900 per year	4	3,600 00	108 per year	1	108 00
730 per year	1	730 00	100 per year	9	900 00
720 per year	1	720 00	90 per year	2	180 00
650 per year	1	650 00	85 per year	2	170 00
600 per year	4	2,400 00	84 per year	1	84 00
540 per year	2	1,080 00	81 per year	1	81 00
500 per year	2	1,000 00	80 per year	2	160 00
480 per year	2	960 00	75 per year	9	675 00
400 per year	5	2,000 00	70 per year	3	210 00
360 per year	1	360 00	65 per year	1	65 00
350 per year	1	350 00	60 per year	20	1,200 00
300 per year	3	900 00	50 per year	17	850 00
252 per year	1	252 00	40 per year	5	200 00
250 per year	2	500 00	35 per year	3	105 00
240 per year	1	240 00	30 per year	4	120 00
225 per year	2	450 00	25 per year	1	25 00
210 per year	1	210 00	20 per year	1	20 00
200 per year	3	600 00	5 per year	1	5 00
180 per year	1	180 00	Total	143	\$29,545 00
150 per year	10	1,500 00	Average		206 70
140 per year	1	140 00			

The above table is a very good illustration of the salaries received by the city and village clerks. Very few of the larger cities are included even in this table as is plain from the figures. The salaries range all the way from \$1700 per year to \$5 depending upon the city and the work and responsibilities involved. In all, 143 cities or clerks are included and these together received during the year the sum of \$29,545 or an average of about \$206.70 to each.

Fifteen clerks received \$600 or more; eleven received from \$400 to \$600; fifteen drew from \$200 to \$400 per year. From this it appears that 142 received less than \$200 per year. It is plain from these figures that only a small proportion received enough to pay them for devoting all their time to their official duties.

CITY AND VILLAGE TREASURER.

Yearly salary.	No. of places.	Total.	Yearly salary.	No. of places.	Total.
\$1,600 per year	1	\$1,600 00	\$100 per year	7	\$700 00
1,200 per year	1	1,200 00	93 per year	1	93 00
1,000 per year	2	2,000 00	80 per year	1	80 00
900 per year	2	1,800 00	75 per year	2	150 00
800 per year	1	800 00	60 per year	2	120 00
600 per year	2	1,200 00	50 per year	4	200 00
540 per year	2	1,080 00	25 per year	3	75 00
500 per year	3	1,500 00	20 per year	1	20 00
400 per year	1	400 00	Total	40	\$14,168 00
300 per year	3	900 00	Average		354 20
250 per year	1	250 00			

Here we find the yearly salary of each of 40 city and village treasurers. The salaries run all the way from \$20 up to \$1,600, which latter is the highest figure, while the average to each is \$354.20 per share.

STREET COMMISSIONERS, SUPERINTENDENTS, AND INSPECTORS.

Yearly salary.	No. of places.	Total.	Yearly salary.	No. of places.	Total.
\$1,200 per year	1	\$1,200 00	\$312.00 per year	1	\$312 00
900 per year	1	900 00	180.00 per year	1	180 00
800 per year	1	800 00	165.00 per year	1	165 00
788 per year	1	788 00	157.00 per year	2	315 00
750 per year	1	750 00	150.00 per year	2	300 00
600 per year	4	2,400 00	135.00 per year	3	405 00
565 per year	1	565 00	115.84 per year	1	115 84
541 per year	1	541 00	105.00 per year	1	105 00
540 per year	1	540 00	90.00 per year	3	270 00
500 per year	1	500 00	86.50 per year	1	86 50
480 per year	1	480 00	75.00 per year	1	75 00
450 per year	1	450 00	66.00 per year	1	66 00
430 per year	1	430 00	65.00 per year	2	130 00
420 per year	1	420 00	50.00 per year	1	50 00
400 per year	4	1,600 00	37.00 per year	1	37 00
396 per year	1	396 00	33.00 per year	1	33 00
350 per year	2	720 00	Total	48	\$16,447 34
322 per year	1	322 00	Average		\$342 65

Here is a statement of the earnings of street commissioners, superintendents and inspectors. The number of such officers

SALARIES AND WAGES IN CITIES AND VILLAGES. 921

included is 48 and their total salary for the year was \$16,447.34 which makes the average to each about \$342.65.

Considered in detail the table shows that all kinds of salaries were paid. The highest is that of \$1,200; the next in order is \$900, then come \$800, 788, and \$750. In each, one of these cases there is only one person who receives the salaries named. Four street officers received \$600 each. From this each class has only one person each down to the one of \$400 per year which includes four persons. The decrease is gradual. Eleven received from \$100 to \$200 per year and another eleven persons received less than \$100 per year.

ASSESSORS.

Yearly salary.	No. of places.	Total.	Yearly salary.	No. of places.	Total.
\$1,200.00 per year	1	\$1,200 00	\$65.00 per year	1	\$ 65 00
1,000.00 per year	2	2,000 00	60.00 per year	2	120 00
972.00 per year	1	972 00	50.00 per year	8	400 00
900.00 per year	2	1,800 00	40.00 per year	3	120 00
800.00 per year	2	1,600 00	35.00 per year	4	140 00
480.00 per year	1	480 00	34.00 per year	1	34 00
375.00 per year	1	375 00	30.00 per year	8	240 00
300.00 per year	1	300 00	27.36 per year	1	27 36
150.00 per year	4	600 00	26.00 per year	1	26 00
135.00 per year	1	135 00	25.00 per year	3	75 00
120.00 per year	1	120 00	18.00 per year	1	18 00
100.00 per year	2	200 00	17.00 per year	1	17 00
85.00 per year	1	85 00	3.00 per year	1	3 00
80.00 per year	1	80 00			
75.00 per year	3	225 00	Total	60	\$10,257 36
			Average		\$170 96

CITY PHYSICIANS.

Yearly salary.	No. of places.	Total.	Yearly salary.	No. of places.	Total.
\$480 per year	1	\$480 00	\$110 per year	1	\$110 00
420 per year	1	420 00	100 per year	2	200 00
400 per year	2	800 00	76 per year	1	76 00
300 per year	1	300 00	70 per year	1	70 00
250 per year	1	250 00	25 per year	1	25 00
200 per year	6	1,200 00			
120 per year	1	120 00	Total	19	\$4,051 00
			Average		\$213 21

HEALTH OFFICERS.

Yearly salary.	No. of places.	Total.	Yearly salary.	No. of places.	Total.
\$600 per year	1	\$600 00	\$40 per year	2	\$80 00
420 per year	1	420 00	35 per year	2	70 00
250 per year	1	250 00	28 per year	1	28 00
248 per year	1	248 00	25 per year	3	75 00
200 per year	5	1,000 00	20 per year	1	20 00
150 per year	1	150 00	10 per year	2	20 00
100 per year	1	100 00	5 per year	2	10 00
75 per year	1	75 00	Total	28	\$3,294 00
60 per year	3	180 00	Average		\$117 65

POOR COMMISSIONERS.

Yearly salary.	No. of places.	Total.	Yearly salary.	No. of places.	Total.
\$600 per year	4	\$2,400 00	\$150 per year	1	\$550 00
500 per year	1	500 00	100 per year	2	200 00
450 per year	2	900 00	Total	12	\$4,930 00
420 per year	1	420 00	Average		\$411 65
360 per year	1	360 00			

CHIEFS OF POLICE OR MARSHALS.

Yearly salary.	No. of places.	Total.	Yearly salary.	No. of places.	Total.
\$1,080.00 per year	1	\$1,080 00	\$200.00 per year	1	\$200 00
1,000.00 per year	1	1,000 00	180.00 per year	5	900 00
900.00 per year	4	3,600 00	150.00 per year	1	150 00
840.00 per year	1	840 00	145.00 per year	1	145 00
730.00 per year	1	730 00	144.00 per year	2	288 00
720.00 per year	2	1,440 00	120.00 per year	5	600 00
625.00 per year	1	625 00	108.00 per year	4	432 00
600.00 per year	11	6,600 00	100.00 per year	6	600 00
540.00 per year	3	1,620 00	96.00 per year	1	96 00
500.00 per year	4	2,000 00	90.00 per year	1	90 00
480.00 per year	8	3,840 00	80.00 per year	1	80 00
456.25 per year	1	456 25	70.00 per year	2	140 00
420.00 per year	7	2,940 00	62.00 per year	1	62 00
400.00 per year	4	1,600 00	60.00 per year	5	300 00
390.00 per year	1	390 00	50.00 per year	10	500 00
365.00 per year	1	365 00	45.00 per year	1	45 00
360.00 per year	2	720 00	40.00 per year	1	40 00
350.00 per year	1	350 00	30.00 per year	4	120 00
300.00 per year	4	1,200 00	25.00 per year	3	75 00
250.00 per year	2	500 00	Total	120	\$37,929 25
240.00 per year	4	960 00	Average		\$316 08
210.00 per year	1	210 00			

The above table relates to chiefs of police and police marshals. In larger places where several policemen are employed

the man at the head of the police force is usually called the chief. In smaller places on the other hand where only one man or so is employed for police duty this man, who has various duties to look after, is generally called marshal.

The number of chiefs and marshals included in above table is 120. The total salary of these amounted to \$37,929.25 or an average to each of \$316.08.

Only two chiefs received \$1,000 or over, while 27 received from \$500 up to \$900 both inclusive. Thirty-seven received from \$200 to \$400 inclusive, and 54 received less than \$200 per annum.

POLICEMEN AND WATCHMEN.

Yearly salary.	No. employed.	No of places.	Total.	Yearly salary.	No. employed.	No. of places.	Total.
\$620.00	8	1	\$4,960 00	\$365.00	3	3	\$1,095 00
600.00	19	5	11,400 00	360.00	2	2	720 00
576.00	4	1	2,304 00	300.00	4	4	12,000 00
560.00	2	1	1,120 00	150.00	3	1	450 00
540.00	26	8	14,040 00	120.00	1	1	120 00
500.00	4	2	20,000 00	40.00	1	1	40 00
480.00	3	5	1,440 00	25.00	1	1	25 00
456.00	5	2	2,280 00	13.25	2	1	26 50
450.00	2	1	900 00	12.50	2	1	25 00
420.00	1	1	420 00	Total	97	44	\$64,176 50
407.00	3	1	1,221 00	Average			\$661 85
400.00	1	1	400 00				

The preceding presentation shows the earnings of 97 policemen and watchmen employed in 44 cities and villages in the state. In considering the table in detail it is seen that one city employing eight policemen paid them for their services at the rate of \$620 per year; that five cities employing 19 policemen paid each \$600 per annum; that two places paid \$576 and \$560 respectively to the one man each of these places employed; that 26 persons, employed in 8 cities received \$540 per year; that 4 policemen in two cities received \$500; that 15 persons employed in eleven places received from \$400, to \$500 per annum, and that 9 persons employed in nine places were paid at a rate varying from \$300 to just below \$400 per year. It can perhaps be said that those who have thus been enumerated give their entire time to their official duties. About 10 persons employed in six places received less than \$200 per year, and it is likely that none of these gave their entire time to these duties.

FIREMEN.

Yearly salary.	No. employed.	No. of places.	Total.	Yearly salary.	No. employed.	No. of places.	Total.
\$1,200.00	1	1	\$1,200 00	\$175.00	1	1	\$175 00
1,110.00	1	1	1,110 00	150.00	11	2	1,650 00
900.00	2	2	1,800 00	100.00	2	1	200 00
876.00	1	1	876 00	75.00	2	1	150 00
840.00	1	1	840 00	60.00	1	1	60 00
720.00	1	1	720 00	54.00	1	1	54 00
600.00	18	5	10,800 00	50.00	3	2	150 00
540.00	61	6	32,940 00	25.00	3	2	75 00
510.00	2	2	1,020 00	22.75	11	1	250 00
500.00	17	2	8,500 00	20.00	2	1	40 00
480.00	3	3	1,440 00	15.00	1	1	15 00
460.00	1	1	460 00	10.00	1	1	10 00
400.00	9	1	3,600 00	5.62	24	1	135 00
350.00	1	1	350 00				
348.00	2	1	696 00	Total	188	47	\$70,395 00
300.00	3	1	900 00	Average			\$374 00
200.00	1	1	200 00				

The above statement deals with the firemen, or the persons who are employed in the fire-department service in the various places in the state. The table shows that 2 persons employed in two places received over \$1,000 per annum; that 5 persons employed in five places received from \$700 to \$900 inclusive; that 98 persons employed in fifteen places were paid from \$500 to \$600 inclusive; that 19 persons in eight places were paid from \$300 to \$480; that 15 persons in five places had a yearly salary of from \$100 to \$200 and that 49 persons in twelve places were paid less than \$100 each. It is perhaps fair to say that only those who received over \$300 per year could have been said to devote all their time to the duties.

The total salary for 188 persons was \$70,395, which is equal to an average of \$374 to each person.

WATER DEPARTMENTS.

Yearly salary.	No. employed.	No. of places.	Total.	Yearly salary.	No. employed.	No. of places.	Total.
\$840.00	3	1	\$2,520 00	\$450.00	2	1	\$900 00
752.00	3	1	2,256 00	420.00	2	2	840 00
740.00	6	1	4,440 00	400.00	1	1	400 00
730.00	1	1	730 00	360.00	1	1	360 00
720.00	2	2	1,440 00	340.00	1	1	340 00
700.00	2	1	1,400 00	320.00	3	1	960 00
690.00	3	2	2,070 00	300.00	1	1	300 00
678.00	2	1	1,356 00	250.00	1	1	250 00
660.00	2	1	1,320 00	180.00	1	1	180 00
600.00	4	4	2,400 00	120.00	1	1	120 00
570.00	2	1	1,140 00	90.00	1	1	90 00
560.00	1	1	560 00	70.00	1	1	70 00
540.00	1	1	540 00	35.00	1	1	35 00
525.66	3	1	1,580 00				
490.00	2	1	980 00	Total	54	34	\$29,577 00
				Average			\$547 70

The preceding table gives the yearly salaries of 54 superintendents and engineers connected with the water department in 34 cities.

From this table it can be said that 17 persons employed in seven cities were paid at a rate varying from \$700 to \$840 per year; that 18 persons received an amount annually varying from about \$525 to \$690; that 13 persons in nine places received from \$300, to \$490; and that 6 persons in six places were paid less than \$300 yearly.

The total wages were \$29,577 and the average to each person was \$547.70.

LAMPLIGHTERS AND JANITORS.

Yearly salary.	No. employed.	No. of places.	Total.	Yearly salary.	No. employed.	No. of places.	Total.
\$350.00	1	1	\$350 00	\$120.00	2	2	\$240 00
504.00	1	1	504 00	108.00	2	2	216 00
480.00	4	2	1,920 00	105.00	1	1	105 00
420.00	3	3	1,260 00	100.00	1	1	100 00
400.00	3	3	1,200 00	80.00	1	1	80 00
370.00	1	1	370 00	75.00	1	1	75 00
360.00	4	3	1,440 00	60.00	4	4	240 00
350.00	1	1	350 00	50.00	4	4	200 00
300.00	4	3	1,200 00	36.00	1	1	36 00
240.00	1	1	240 00	30.00	1	1	30 00
200.00	2	2	400 00	18.00	1	1	18 00
198.00	1	1	198 00	12.00	1	1	12 00
145.00	1	1	145 00				
144.00	1	1	144 00				
				Total	48	44	\$11,353 00
				Average			\$236 50

MISCELLANEOUS.

Yearly salary.	No. employed.	No. of places.	Total.	Yearly salary.	No. employed.	No. of places.	Total.
\$500.00	1	1	\$500 00	\$75.00	1	1	\$75 00
480.00	4	3	1,920 00	60.00	1	1	60 00
400.00	3	1	1,200 00	51.50	2	1	103 00
365.00	1	1	365 00	24.00	1	1	24 00
360.00	2	2	720 00	15.00	1	1	15 00
290.00	6	1	1,740 00	10.00	1	1	10 00
250.00	1	1	250 00	6.00	7	1	42 00
200.00	1	1	200 00	5.00	1	1	5 00
140.00	1	1	140 00				
100.00	1	1	100 00				
				Total	36	21	\$7,469 00
				Average			\$207 50

The foregoing two tables are concerned with lamplighters, etc., and miscellaneous employes. Of lamplighters and janitors, 48 persons employed in 44 places are included. Of miscellaneous 36 persons employed in 21 places are included.

The highest earnings received by the lamplighter and janitor was \$650, and the lowest \$12, while 22 persons employed in 18 places were paid over \$300, and 24 persons employed in that number of places drew less than \$300 per year.

For miscellaneous workers the story varies but little. Here we find that 10 persons in 8 places received over \$300, and 26 persons in 13 places were paid less than \$300 per year.

The average yearly earnings for lamplighters and janitors was \$236.50, while for miscellaneous it was \$207.50.

SHOWING THE NUMBER OF DAYS OF COMMON LABOR, THE RATE OF WAGES PER DAY, AND TOTAL AMOUNT PAID AS WAGES IN 122 CITIES AND VILLAGES IN 1900.

Number of cities and villages reporting.	No. of days of common labor.	Rate of wages per day.	Total amount paid as wages.
113	122,145	\$1 50	\$183,217 50
1	1,782	1 40	2,494 80
1	1,387	1 38	1,914 06
1	437	1 35	589 95
6	2,748	1 25	3,435 00
122	128,499	\$1 49	\$191,651 31

The above presentation shows for the number of cities and villages included, the number of days of common labor during the year, the rate of wages per day and the total amount paid as wages during the year.

The cities or places included are classified according to the rate of wages paid. Thus we find 113 places where rate of wages for common labor was \$1.50 per day and where the number of days of common labor footed up to 122,145 and the total wages to \$183,217.50. The next class in order includes one city. In this place the number of days of labor was 1,782, the rate of wages \$1.40 and the total wages \$2,494.80. The third class in order also includes one city, and in this case the days of labor numbered 1,387, the rate per day \$1.38, and the total wages \$1,914.06. In the fourth class the days numbered 437,

the rate \$1.35 and the total wages \$589.95. The fifth or last class includes six places with 2,748 days of labor, the rate of wages at \$1.25, and the total wages \$3,435.

In summarizing these figures it is found that 122 places are included; that the days of labor numbered 128,499; that the average rate of wages was \$1.49 per day; and that the total amount paid as wages footed up \$191,651.31.

The returns were so incomplete that it was absolutely impossible to ascertain definitely just how many persons were employed in these places. It appeared, however, that the average working time to each person was about 200 days during the year. Computed on this basis the following figures will represent the average number of persons employed 200 days in the year and the average yearly earnings.

AVERAGE YEARLY EARNINGS AND AVERAGE NUMBER OF PERSONS EMPLOYED.

Classification of cities, etc.	Number persons.	Average yearly earnings.
113 with rate of wages at \$1.50	611	\$299 87
1 with rate of wages at 1.40	9	277 20
1 with rate of wages at 1.38	7	273 47
1 with rate of wages at 1.35	2	269 96
6 with rate of wages at 1.25	13	250 70
Average of 122 with rate of wages at \$1.49	642	\$298 52

As said above, the indications were that about 200 days was the average time of employment during the year for the common laborers in the cities included. With this as a basis, the number of persons who were employed at the different rates and their average yearly earnings was computed and the results given in the above table.

In this table is seen, that on this basis 611 persons were employed at \$1.50 per day and that their average earnings was \$299.87. Those in the other four classes while employed the same length of time received a lower rate per day and hence show a lower yearly earning. The average rate was \$1.49, the total number employed was 642 persons, the average days at work 200, and the average yearly earnings \$298.52.

CLASSIFICATION OF DAYS OF LABOR AND THE NUMBER OF CITIES
IN EACH CLASS.

Classification of days of common labor.	Number of cities and villages in each class.
100 days or less	15
101 days to 200 days inclusive	18
201 days to 300 days inclusive	10
301 days to 450 days inclusive	20
451 days to 600 days inclusive	7
601 days to 900 days inclusive	14
901 days to 1,200 days inclusive	11
1,201 days to 1,500 days inclusive	4
1,501 days to 2,400 days inclusive	10
2,401 days to 4,800 days inclusive	8
4,801 days to 7,200 days inclusive	2
Over 7,200 days	3
Total places	122

Here is found a classification of the days of labor in the places included. The table shows that 33 places had 200 days or less of labor done; that 37 had from 201 to 600 days of labor; that 25 had from 601 to 1,500 days; that 23 had from 1,501 to 7,200 days and 3 places had over 7,200 days of labor each performed during the year. While this is not very definite it still conveys a great deal of information concerning the amount of labor that the various places find it necessary to provide for.

SUMMARY OF THE NUMBER EMPLOYED AND THE AVERAGE YEARLY
EARNINGS.

Classification.	Number persons.	Average yearly earnings.
Attorneys	47	\$300 60
Engineers	15	776 00
Clerks	143	206 70
Treasurers	40	354 20
Street Commissioners, etc.	48	342 65
Assessors	60	170 96
Physicians	19	213 21
Health Officers	28	117 65
Poor Commissioners	12	411 00
Chiefs of Police, Marshals	120	316 08
Policemen, etc.	44	661 85
Firemen	188	374 00
Water Department	54	547 70
Lamplighters, etc.	48	236 50
Miscellaneous	36	207 50
Common labor	642	298 52

In the preceding presentation is given the classification with reference to profession or occupation of the persons employed by the cities and villages included, the number of persons in each class, and the average yearly earning of each person in the different classes.

Of the classes included common labor shows the greatest number of persons. Next in order is the firemen, city clerks, chiefs of police and town marshals, etc. The smallest number is that for poor commissioners.

With reference to the yearly earnings it is found that the city engineers received the largest amount. Next in order are the policemen with \$661.85. It will be noticed that according to this table the policemen earned more than the chiefs of police and town marshals. The reason for this apparent discrepancy is that town marshals were included with the chiefs. While the chiefs usually received a higher salary than policemen, the town marshals received less; and, outnumbering the chiefs in the above class caused a low average for both. The third in order in point of earnings were those employed in the water departments. The Poor Commissioner and Treasurer received the smallest sum.

In considering the above table as well as all the other tables in this connection it will be noticed that, in some classes at least, the number of persons included is proportionately small, and that the yearly earnings are comparatively low. The reason for this is that with few exceptions the reports were received from the smaller cities and villages. It is well known that the smaller places employ comparatively few persons and that, as the duties are light and the cost of living often low, they pay much lower salaries than larger cities. The facts as they stand, however, constitute a fair representation of the salaries paid in the medium sized and smaller cities and villages in this state.

LABOR ORGANIZATIONS.

One of the most striking revelations of history is what Spencer calls the process of "integration and disintegration." Plants germinate, grow and perform their function in nature and decay. Animals come upon the stage of action, perform their part and disappear. States rise up and complete their work and fall, leaving a mass of rubbish upon which to build a new state whose internal structure must be so arranged and put together that it will take hold of and meet the new conditions for which it was formed. When this is accomplished the state again disintegrates and the process is again repeated.

The same is true in the industrial world. A certain kind of machinery is put forth to perform a certain kind of work, but when competition begins to make itself felt, and the demands made upon the machine are greater than its capacity, it is discarded and a new one placed in its stead that will meet the new conditions. The same is true of farming and transportation. The farmer, who year after year plows the ground, sows and reaps, discovers as population increases and the demand for his products is greater than his ability to produce, that he must reduce his methods to a more scientific basis. He makes a study of his soil, its needs and adaptation for certain crops, and directs his energy accordingly. The greater the demand for the products of the farm and factory the greater must be the facilities for producing various products and the facilities for transporting them from place to place. Out of this necessity has gradually developed our modern railroads, steamships, telegraphs, telephones, etc.

Out of all these conditions, and through a similar course of development came the modern corporations, the great manufacturing and transportation companies which employ, in one way or another, nearly all the laborers of civilized countries, known collectively as the "laboring classes," and it is about this class, their integration into labor unions, that we are now

concerned. With the rise of our present competitive system comes also a resistance to competition by all the great producers. It is resisted on the one hand by more improved machinery and methods of production, and on the other by longer hours of labor and lower wages for the laborer. It is at this point that labor comes in contact, I may say, collision, with the competitive forces of the modern industrial world. On the one hand, the manufacturer, seeking to avoid or eliminate the competitive forces, follows "along the lines of least resistance," and in this process the laborer is pushed aside or trampled under foot; on the other hand the laborer in his struggle for existence follows the lines of least resistance to him, and as a result his wife and children are brought into the workshop to earn their own living. The evils of this have been discussed elsewhere.

In early times monarchical governments were very severe in their dealings with any form of organization among the laboring classes, and in order to escape the punishments meted out to them, they often clothed their organizations with secrecy resulting in what we know as "secret societies."

The first labor organizations of which we have any history, more nearly resembled a modern strike or boycott than a labor organization as it exists today. It was not until the rudiments of our industrial system began to form, and the prospects of a laborer becoming a journeyman or a master were reduced to a minimum, that labor organizations in the modern sense of the term began to take shape.

These organizations were not based on the same fundamental principles as those of our times. They were organizations of laborers doing a particular kind of work in a particular trade. The piecers of the cotton mills would form one organization, and the spinners another. As a natural outcome of this arrangement the members of the piecer's organization were always looking forward to the time when they would become spinners, and, naturally enough, they became more interested in the wages and general welfare of the spinners than of their own, and as a result the piecer's association fell to pieces.

In other lines of occupation we frequently find the workmen

doing a particular line of work requiring the most skill, and therefore receiving the highest wages, organized into one fraternal bodies, and the laborers doing other but less skilled work organized into subordinate societies, and so on down through the list. While the organization at the top of this series possessed a degree of permanence, those subordinate to it tended more or less to center their interest in the one at the top and the inevitable result was a falling to pieces of the whole series.

The most stable organizations of labor found at that time were among those occupations where the economic position of the workmen in passing from apprenticeship to the position of master remained the same. A mason was a mason all his life. A labor union formed of men working at this trade was comparatively stable. The influences which worked the disintegration of those organizations mentioned above were eliminated in this instance. Unions among tilers was another illustration of this class. What was true of labor organizations, in this respect, in earlier times, is true to a large extent today.

The character of the earliest labor organizations is best illustrated in the following words from Adam Smith's *Wealth of Nations*. Smith says, "People of the same trade seldom met together, even for merriment and diversion, but the conversation ended in a conspiracy against the public, or in some contrivance to raise prices," and history indicates that the oldest labor union in existence, "the Book Binders," has its roots in a gathering of journeymen "to take a social pint of porter together."

It is such organizations as these that Howell claims were the direct successors of the guilds; but Mr. Webb claims that they *were* guilds and that trade unions did not descend from the guilds and did not bear any relation to them. The latter opinion appears to be the more logical both from an historical point of view and from the motive forces which called the two into existence. The guilds came into existence as an institution by which the community itself controlled its various industries. They were in themselves masters of industry while trade unions, on the other hand, did not pretend to control industry, but were rather inclined to be antagonistic to those who

did. They were organizations whose object was to make themselves felt in the race for life, to be able to assert their rights and maintain their ground against employers of labor and unjust laws. The guilds, on the other hand, controlled their local government; in fact the guild was the local government, while trade unions in their early stages must bow their heads to local government.

Turning from hypothetical grounds to recorded facts, we do not find anything which resembles trade unions as we know them previous to the year 1700. The members of the crafts guilds prior to that time were independent producers, while members of trade unions were dependent producers. Each laborer was a unit within himself and any attempt on his part to secure from his master his just portion of the world's economic goods was met with scorn and ridicule. He was practically owned by his master who exerted the same arbitrary authority over his employee and his family, as the master over his slave. Every attempt on the part of the laborer to throw off this "yoke of oppression" resulted in a further reduction to serfdom.

Out of such an industrial condition grew labor unions. After the individual had from time to time made the attempt to better his own condition and had as many times met worse than defeat, he discovered that "in union there is strength." Until industrial conditions made labor unions necessary in this way, all such organizations and societies were short lived. There was nothing to compel their continuation, but as soon as the time came when, in order to establish a certain line of business, it required more capital than the journeyman himself could furnish, from that moment the business took the nature of a corporation instead of an industry of a domestic nature. This made skilled labor useless except for hire at the hands of the capitalists. Here began the differentiation of the functions of capital and labor, or as Dr. Ingram put it in his address to the Labor Union Congress at Dublin in 1880, "the whole modern organization of labor in its advanced form rests on the fundamental fact which has spontaneously and increasingly developed itself—namely, the definite separation

between the direction of industrial operations and their execution in detail."

In 1720 the Journeymen tailors of London combined to secure better wages and shorter hours. The masters immediately laid in a complaint to Parliament stating that the action of the journeymen tailors was a conspiracy dangerous to the State and to trade; that it was unjust, presumptuous, etc. Parliament took up the matter at once and a law was enacted against such combinations. The journeymen tailors were just as prompt in refusing to obey the law as Parliament had been in enacting it. The Privy council took the matter in hand and directed its energies against this society but with little success.

Other labor unions were organized. The Stockingers, Cutters, Clothiers, Spinners, etc., were all of a similar character and had a similar end in view. All complained more or less of "the oppression of the poor by the rich," "low wages," and poor economic conditions in general, and all were proceeded against for violating the combination laws. The Wool Workers were proceeded against by a proclamation of the king. The result of all this was not a suppression of these organizations, but a change in their character, especially their outward appearance. Instead of organizing with the avowed purpose of retaining control of the products of their own labor, they organized "for benevolent and charitable purposes," or they met and organized in secret. The Wool Combers were perhaps the first to organize under the garb of a benevolent society. They resembled somewhat the German free employment agencies described elsewhere in this report. But with the introduction of mechanical power all these labor societies fell to pieces.

Everywhere the wage earner saw the degradation into which he was being driven, and in every instance mistook the cause. They petitioned Parliament for laws that would neutralize these supposed causes and as many times the employer would use his influence in the opposite direction. Parliament was asked to pass more rigid apprentice laws in behalf of labor. After passing them Parliament would be forced to repeal them

either by their failure to bring about the desired relief, or by the pressure brought to bear by employers. The introduction of machinery was also attributed to be the cause of low wages and idleness, and Parliament was asked to prohibit employers from using machinery, and on investigation as to the effects of such a prohibition the employers would produce overwhelming and conclusive evidence that such a policy would be unwise. In other instances the wage earner would attribute his low "standard of living" to the importation of foreign goods of the same kind he produced, and in many instances this occasioned riots which spread to such an extent that Parliament passed laws prohibiting importation. This experiment failed and rioting continued. As a last resort Parliament passed laws giving Justices of the Peace the power of fixing wages. This proved satisfactory for a time, but sooner or later it was found that in many instances the justices themselves were directly interested in low wages and in others they were prevailed upon by employers of labor to fix low rates, and so the trouble continued. This aroused a feeling of distrust and hostility to such an extent that Parliament was at a loss to know what to do. The competence of magistrates to fix wages was disputed by the cotton weavers, as a body, in 1812, and they carried their case to the courts. The courts decided that the wages as fixed by the magistrates were reasonable and just. The case was appealed and the employers were forced into a long and tedious litigation in which one hundred and thirty witnesses were examined as to each of the many rates proposed. The court decided in favor of the employers but made no provision for enforcing the wages fixed and a strike ensued. Many of the leaders were arrested and placed in prison, and otherwise prosecuted to such an extent that for a time they lost all hope of securing better wages or a higher "Standard of Living." But other laborers rallied to their support and Parliament was prevailed upon to repeal both the law authorizing justices of the peace to fix wages, and the statute of apprentices and the combination laws. So goes the history of labor struggles up to 1825.

Previous to 1824 the history of trade unions was one of perse-

cution and repression. Mr. Webb says in his history of trade unions, "Every union that can claim an existence of more than half a century possesses a romantic legend of its earlier days. The midnight meeting of patriots in the corner of fields, the buried box of records, the secret oaths, the long terms of imprisonment of officials—all these are in the sagas of the older unions, and form material out of which, untroubled by historical criticism, a semi-mythical origin might easily have been created."

The Combination laws of 1799 and 1800, and the twenty years of persecution of members of trade unions as rebels and revolutionists, checked the growth of labor unions until after 1824. The first quarter of the century just closed may be justly called the dark ages of the history of trade unions. During this period while the Combination laws were in force, combinations of employers were allowed "for the purpose of fixing the wages of the laborers," while combinations among laborers "for the purpose of regulating wages" were denounced and prosecuted to the bitter end. It was said by Lord Jeffrey that "a single master was at liberty at any time to turn off the whole of his workmen at once—100 or 1,000 in number—if they would not accept the wages he chose to offer. But it was made an offence for the whole of the workmen to leave that master at once if he refused to give the wages they chose to require."

The Combination laws applied to employers as well as employes, but it was very seldom magistrates would enforce them against masters. Of course they were not always enforced against laborers, but where they were not it was generally due to an ineffective police system, or the leniency or cowardice of employers. An illustration of this is found in the case of the Calico Printers union in which the master did not proceed further than to issue to the members of this union a pamphlet called "Considerations addressed to the Journeymen Calico-printers by one of its Masters." In this address the workmen are appealed to as follows: "We have by turns conceded what we ought all manfully to have resisted, and you, elated with success, have been led on from one extravagant demand to another, till the burden has become too intolerable to be borne. You fix the

number of our apprentices, and oftentimes even the number of our journeymen. You dismiss certain portions of our hands, and will not allow others to come in their stead. You stop all surface machines, and go the length even to destroy the rollers before our face. You restrict the cylinder machine, and even dictate the kind of pattern it is to print. You refuse on urgent occasions, to work by candle-light, and even compel our apprentices to do the same. You dismiss our overlookers when they don't suit you, and force obnoxious servants into our employ. Lastly, you set all subordination and good order at defiance and instead of showing deference and respect to your employers, treat them with personal insult and contempt." In other cases masters even went the bail of members of labor unions in their employ, who had been arrested for illegal combination; but these instances are very rare. These illustrations are important in that they show a tendency on the part of employers to weaken in their persistent efforts to stamp out concerted action on the part of employees.

In 1843 the Coach-makers union of London was broken up by the arrest and conviction of its leading members. The calico engravers of Manchester met the same fate after refusing to work on account of the rapid increase in the number of apprentices.

But the oppressive weight and injustice of the Combination laws were felt most in the textile industries. The Act of 1800 is described in "A Few Remarks, &c.," p. 86, as "a tremendous millstone around the necks of the local artisan, which has depressed and debased him to the earth; every act which he has attempted, every measure which he has devised to keep up or raise his wages, he has been told was illegal; the whole force of the civil power and influence of his district has been exerted against him because he was acting illegally; the magistrates acting, as they believed, in unison with the views of the legislature, to check and keep down wages and combination, regarded, in almost every instance, every attempt on the part of the artisan to ameliorate his situation or support his station in society as a species of sedition and resistance to the government: every committee or active man among them was regarded as a

turbulent, dangerous instigator, whom it was necessary to watch and crush if possible."

To show the truth of the above statement, we cite the case of a president and secretary of a union who were imprisoned for calling their members together to consider the justness of asking for an increase in wages; even though it developed in the trial that the meeting was called at the invitation of the employers themselves, the result was both were fined and imprisoned for long terms. The next year fifteen cotton spinners, who had met together for the purpose of raising funds to bury a dead co-worker, were seized by the police for conspiracy and imprisoned for four months to await trial. On being brought to trial it was held by the court that even though a body claimed to meet for a benevolent purpose, it was simply a cloak for conspiring against the state; and the prisoners were committed to prison for various terms. Another instance is the Scotch weavers who struck for higher wages about the year 1812. The employers were about to accede to their demands and negotiations were progressing very smoothly in that direction, when the government arrested and imprisoned the committee who were conducting the negotiations.

These are illustrations of the hundreds of cases brought before the courts of England during the first half of the nineteenth century. For a time the effect was to suppress labor organizations, but soon a reaction set in and a more formidable and aggressive form of organization began to grow. Secret societies were formed whose leaders were kept in the background, but whose demands were obeyed to the letter. Grievances were not only communicated to members of the same local lodge, but were heralded far and wide. Matters came to such a pass that employers could not get men to take the place of those who had quit their employ for some grievance against the employer. Employers even sent to the remotest parts of England for laborers but without avail. Laborers came to understand one another perfectly and they respected one another's rights equally well. When a laborer quit the employ of a master on account of unjust treatment, no one could be found to take his place. The place must remain vacant until the trouble between master and servant had been amicably settled.

But the economic condition of England in 1820 which marks the close of a long war period, the political and industrial depression of the time,—contributed to effect an agreement among masters not to pay over certain wages. In the wild scramble for the sale of manufactured goods which followed this industrial depression, in the attempt of one master to undersell another, wages in general were driven to the borderline of starvation. All this tended to create a general discontent which continued to grow until the repeal of the obnoxious Combination laws in 1824.

The repeal of these laws was due in a large measure to the labors of Place and Hume. These men were employed by Parliament to conduct a series of investigations relative to the true economic conditions of the poor. The report of their investigations shows that they found the workingmen filled with false ideas as to the real cause of their distress. Taxes, Combination laws, the arbitrary rule of masters, labor saving machinery, unjust magistrates, and immigration laws,—all these they claimed, were the direct and principal causes of what Webb calls the low "Standard of Living" of the laboring classes.

Unionism which for more than a quarter of a century had been smouldering under the ashes of oppression now burst forth into unquenchable flame. Trade societies sprang up everywhere and in all manner of forms. Business increased rapidly and prices rose to such an extent as to warrant a rise in wages, but the employers resisted every inch of the ground over which they were being slowly but surely pushed. The result was strikes and lockouts on every hand during the next six months.

This led to the agitation of a reenactment of the Combination laws and laws expressly prohibiting organized or concerted action on the part of labor. The fight in Parliament over this latter question was long and bitter, but in the end the victory was really in favor of labor. For the first time in history the right of labor to combine for the purpose of bettering their condition was recognized by law, and this recognition by the statute of England has never been changed.

By the enactment of such a law it was prophesied by the masters that anarchy would reign supreme; the nation would be

depopulated or be reduced to pauperism; commerce would cease; capital would be driven from the country, and the ultimate authority of the master would be transposed to the laborer. In a certain sense the last may be true but it is so slight we may safely say that history does not bear up the statement.

The financial crisis of 1825 and the four years hard times which followed led to a breaking up of a majority of the trade unions. This period marks the point at which socialistic agitation begins to take definite shape.

As was said before, the laws of 1825 legalized labor organizations but it prohibited members present at the meetings of such organizations from acting for those members absent, or for laborers who did not belong to the society. Any violation of these provisions was severely dealt with, and in some instances laborers were accused and convicted of crime they were innocent of, when the real motive behind it all was to punish laborers for combination. In one instance in 1834 six laborers in Dorchester were tried, "convicted and sentenced to seven years' transportation, ostensibly for administering unlawful oaths, but really for the crime of combination."

This raised a storm of criticism throughout the country and it is said a procession consisting of 400,000 persons marched to the residence of Lord Melbourne and presented him a petition signed by over 250,000 laborers. At length the convicts were pardoned, many of them never learning of it until years afterward, and then only by mere accident. Such instances as this gave unionism a new impetus. New unions were formed on all sides. National organizations, which will be mentioned later, began to take shape. In 1834 a great many protests were made against the way the law of 1825 was administered, but nothing definite was done toward amending or repealing the law until nearly a quarter of a century later.

Still false and unjust prosecutions (characterized persecutions by workmen) similar to the case at Dorchester mentioned above continued, and trade unions continued to grow in proportion. They increased both in number and members. The unions increased in wealth until grave fears began to be entertained as to the safety of their funds. The attitude of the gov-

ernment officials was such that they feared confiscations, and Parliament was induced to enact a law purporting to protect their funds, but in reality it afforded no protection whatever. It closed one loop-hole and opened another. It afforded the unscrupulous a chance to get hold of the funds to appropriate them to himself and escape punishment through a technicality of the law. This was a most serious blow to labor unions. Funds which had been collected during a series of years with which to maintain themselves against the burdens imposed upon them by employers were stolen by the official into whose hands they were placed for safe keeping. This was discouraging in the extreme. Hundreds of members left the labor unions never to return; others refused to fill the broken ranks. But the persistent kept up the fight, and met with the most stubborn resistance all along the line. In 1866, a committee appointed to look into alleged outrages said to be perpetrated by labor unions brought the attention of Parliament once more to the subject in such a way as to lead that body to appoint a Royal commission to make an extensive inquiry in the subject of labor conditions. After a long and laborious investigation, this commission embodied the results of their investigation in a sixteen volume report. This report was anything but satisfactory to the manufacturer. It was shown here that males and females of all ages between six and eighty years were at work in places where the most primary elements of sanitation were unknown; that the hours of labor per day had reached a point which the physical strength of the laborer was not able to endure; that the wages paid were such that whole families were forced into the 'p'ps in order to obtain sufficient food and clothing to eke out their miserable existence; that it was against these conditions that organized labor was fighting. Using this report as a basis Parliament passed a law, not prohibiting labor unions as was almost universally hoped by manufacturers, but one that is known as the Labor Union Act of 1871. By this act labor unions were legalized in a broader sense than ever before. Organized labor had passed a most trying ordeal but had come out successful without a blot upon its record as far as this particular fight was concerned.

From this time on a new method of securing labor legislation was adopted by labor unions. Public sentiment was moulded along the lines of proposed legislation before Parliament was approached in the matter at all. Public meetings and banquets were held in various places and labor questions were discussed and debated in their various aspects. Handbills and pamphlets were published and scattered broadcast. Conventions were held, where the various doctrines and conclusions reached by laborers and labor leaders in the different localities, were brought together, discussed and arranged in proper form, and published for distribution. Labor newspapers and magazines were also published and made instruments through which the public were reached, and when the time was ripe, Parliament would be petitioned. In 1875 that body passed a law which practically guaranteed all the rights demanded by the workmen at that time. This act provided that any act performed by organized labor should not be liable for punishment when the same act performed by an individual was not punishable by law. The old common law of conspiracy which prohibited any concerted effort on the part of labor to bring about better economic conditions was swept away. From this time on organizations of any kind had the same rights and privileges before the bar of justice as an individual. Labor organizations were left to pursue the work they had begun without further restraint by the state.

This was indeed a great victory. Mr. Howell in his book called "Conflicts of Capital and Labor" says, "The history of the struggles to secure this great victory is not so well known as it should be; it conveys lessons which are replete with interest to workmen, employers, legislatures, and the general public; above all it ought to teach lawmakers that repressive laws are ineffectual, as well as dangerous and oppressive; their effect is demoralizing on the mind; men's ideas of right and wrong become confounded, until a sense of injustice brings about the worst evils of violence, even to ferocity. Men who know that they are criminals by the mere objects which they have in view, care little for the additional criminality involved in the means they adopt. The value of these lessons to the workmen is not a whit less important than to others; if they study them aright,

they will perceive and understand the wisdom of moderation in all their demands, and that it is a duty which they owe to the State, of which they are component members to pursue their objects peaceably and in a constitutional manner; and furthermore, that sooner or later, if the claims put forward are reasonable and just, they will be granted by legislatures. With their present political power, if it be wisely used and directed, no demand, if based on justice, will be refused; but those who denounce the injustice of others must be careful not to incur a like condemnation by reason of their own departure from the principles of equality."

Turning from a more historical treatment to one centered chiefly on objects and aims, we find, as above referred to, the purpose of labor organizations are to secure better conditions, by way of better wages, shorter hours, etc. In other words they hope, by organization, to be able to maintain themselves against the power of the corporation, their wealth and social influence. In their struggles the principle has been developed that legislation must be brought to their aid in order that the end in view might be realized. The old doctrine preached by Adam Smith and contemporaneous economists that the best way to solve the labor problem is to leave laborers alone to work out their own salvation; that each individual should be left free in order to attain the highest development of the whole—it was found that this doctrine of liberty was impractical and should give way to a new and more practical one. This doctrine carried out meant that the strong would subsist at the expense of the weak; the rich having labor to purchase would say to the one having it to sell, "These are the conditions; accept them or not as you choose; I have a sufficiency of economic goods, I can wait, if you do not choose to accept my offer, until you change your mind or until someone else will accept. There is no competition of labor, and you must sell yours in order to obtain a living," and so the story went. Economists saw they were on the wrong trail. They saw that in order for each individual to attain the highest development; they must not be left to prey upon one another as they pleased, but that each must be restrained from preying

upon the rights of others; modern constitutions call these rights "inherent rights." This is called the new doctrine of liberty. Legislatures were tardy in recognizing this "new liberty," as well as the organized effort to secure it. But after this right was conceded, the means of securing it was denied and condemned as unlawful. After a legal recognition of both the end and the means of obtaining them, statutory laws, one after another, came in rapid succession until now organized labor has the same perfect freedom of action that individuals have. They are limited in their acts only by those around them.

One of the greatest essentials to the existence of labor unions is that men should be left free to join them or not as they see fit. A member is perfectly free to induce others to join, but any attempt at coercion is illegal. The right of personal freedom is a sacred right and should not be violated. It is a right for which our forefathers fought and which they won by many sacrifices and hardships and should be defended by every honorable means.

Among the rights belonging to every laborer, and one that should never be taken from him, is the right to fix his own price at which he will sell his labor, and the purchaser of labor has also the right to accept or refuse this price as he sees fit; but he should not be allowed to use the power afforded him by his wealth to prey upon the weak individual laborer; it is held by some that the only way to prohibit the unscrupulous employer from improperly using this power is to fix wages and hours of labor by law. However this may be the State must step in on the side of the weak in some way or other in order to balance up the weight of the strong.

Combinations of employees and employers are equally legal so long as the ends and the means of securing them are within lawful bounds. The Duke of Argyle, in his book entitled, "Reign of Laws," says, "It is often said that the conduct and condition of men are governed by invariable laws, and the conclusion is that the evils which arise by way of natural consequences out of the action of those laws are evils against which the struggles of the will are hopeless. But the facts on which

this conclusion is founded are as usual, inaccurately stated.' 'The conduct of men depends on the balance of motives which are brought to bear upon them. In supplying these motives external conditions and mental character act and react upon each other.' 'The external conditions which tell on the individual will are themselves very often nothing but conditions depending upon the aggregate will of those around us; and if upon them, by any means, new motives can be brought to bear, then the whole of those external conditions may be changed.' 'New motives can be evoked and put in action by the adapting of appropriate means.' 'The mere founding, for example, of a voluntary society for any given purpose evolves out of the primary elements of human character a latent force of the most powerful kind—namely, the motive, the sentiment, the feeling, the passion, as it often is, of the spirit of association.' 'It is a force rooted in the nature of man, implanted there as a part of his constitution, and like all others of this character, given him for a purpose, and having its own legitimate field of operation.' 'Nor is this field a narrow one.' 'The spirit of association is the fountain of much that is noblest in human character, and of much that is most heroic in human conduct.' 'And so it is that when the aim of any given association is a high aim, directed to ends really good, and seeking to attainment of them by just methods of procedure, the spirit of evokes becomes itself a *new law*, a special force operating powerfully for good on the mind of every individual subject to its influence.' 'Some preexisting motives, it modifies, some it neutralizes, some it suppresses altogether, some it compels to look in new directions.' 'But in all cases the spirit of association is in itself a power, a force, a law in the realm of mind.' 'What it can do, and what it cannot do in affecting the conditions of society is a problem not to be solved so easily and so summarily as some dogmatists in political philosophy would have us believe. It is a question which, like so many others, is not likely to be solved by abstract reasoning without the help of actual experiment, and this experiment is being tried. The instincts of men, truer often than the conclusions of philosophy, have rebelled against the doctrine that they are

the sport of circumstances; yet finding by hard experience that this is often true of the individual will when standing by itself, they have resolved to try whether it is equally true of the collective will, guided by the spirit and strengthened by the discipline of association. Hence the phenomena of combination as the means of affecting the condition of labor—phenomena so alarming to many minds, and certainly so well deserving attention.” This is an excellent exposition of the value of association. The weak surely but unconsciously absorb the good qualities of the strong; men, whose character is of a low ebb resulting possibly from either evil associations or heredity, when brought into contact with those men of nobler and more refined characteristics, gradually lose the characteristics brought upon them by their former environment and unconsciously adapt themselves to their new surroundings. This is an unimpeachable law of nature. A man, through his associates may have been led to frequent the saloon; his earnings are spent for drink and his wife and children are at home in actual need—poorly dressed and little to eat—; his wife, perhaps, takes in washing in order to buy bread or pay the rent, etc.; when this man is brought into the company of his fellow workmen through the instrumentality of some labor union or other local organization, it unconsciously dawns upon him that his neighbors, perhaps, are better dressed; some of their wives move in more respectable society, and their children are at school. Looking further, he discovers that some have their little homes on respectable streets and have them paid for, and his mind involuntarily reverts to his own wretched hovel, his family without food and clothing, his children out of school, and the rent not paid. He unconsciously inquires the cause, and the result of all these reflections is he begins to apply his earnings, meager though they are, to the needs of his family. His children are soon on the road to school. His wife begins to move in social circles. He buys a lot and lays the foundation of a future home. New worlds are opened to him. He grows out of the world of misery and want into one of happiness and respectability. He becomes a political and economic unit among his associates, for whom there is developed within

him a spirit of fraternity and feelings of good fellowship. This is a result of the power of association, the foundation upon which all our modern civilization rests, the basis of all our social and political institutions; the very foundation of all labor organizations.

As before stated, the principal object of labor unions is to bring about by combination the things which can not be done by each individual working in his own way. One of the factors necessary for this is what is known as a benefit fund. Each member is taxed a certain yearly or monthly amount which is allowed to accumulate as a benefit fund. This fund is used for various purposes. It may be used to support the family of a sick fellow workman or a workman who has been thrown out of employment. In either case the workman must be free from all charges of delinquency or immorality. A workman discharged for improper conduct is not entitled to benefits. In most cases this is a powerful incentive to morality, to strict attention to work, to the proper discharge of all duties imposed upon him. This is a factor productive of much good. The conditions of all who receive benefits are thereby improved, and the method of procedure to attain these benefits is a great improvement over the old way. It reaches out beyond the confines of the organization, and benefits the State at large by keeping many worthy families out of the clutches of pauperism. In the years 1875 and 1876, four associations of labor in England paid for relief of members \$740,000, an amount nearly equal to the total sum paid for poor relief including furniture, fixtures and salaries for the year 1898 and 1899 for the state of Wisconsin. These societies were the Engineers, Ironmoulders, Boilermakers, and the Carpenters and Joiners. What is true of these organizations is true of hundreds of others. Every dollar they expend in this way is a dollar saved to the State.

Another channel into which this benefit fund is directed is to sustain laborers during a strike. To remain out of work for even a short time would prove a real hardship to many, especially to those having large families. In order to bridge over this difficulty the benefit fund is directed to the support

of those who need it until the question in dispute is settled. This fund is sometimes used in abridging the necessity of laborers accepting low wages, or to prevent long and unreasonable hours being forced upon them, although unnecessary holding out or making too great demands on the part of the laborer is not countenanced by labor organizations.

The recognition of the economic benefit labor organizations has been to the State along the lines just indicated one of the factors leading to the withdrawal of many of the former restrictions imposed by the State. Of all the hardships to which England has subjected her laborers and their organizations, of the fines and imprisonment of members of labor unions, transportations and political as well as social ostracism both by lawful and unlawful means, England is today the exponent of liberal labor laws. She recognizes the legal right of laborers to organize for all the purposes set forth by their present labor constitution and even goes so far as to give them rights which she withholds from employers. All the old prejudices existing in the minds of the public against such combinations have been gradually swept away. She has given labor unions the same rights and the same protection which she guarantees to each individual.

At one time it was a prevailing custom among labor unions to appropriate part of their funds for what was known as a traveling fund, by means of which a laborer out of work could defray his expenses while traveling from place to place looking for work. But the practice came to be abused by a certain class of men found in every society of laborers who would rather tramp than work. This practice was then changed to one of paying railroad fare from place to place while in search of work, and under this system one society was not allowed to subject its members upon the charity of another without the society to which the receiver of such relief belonged refunding the amount received by him. This form of benefit is now being abandoned, and loans are frequently made to laborers worthy of aid, looking for work.

It is curious to note that the "strike benefit" at one time brought labor unions in collision with the State. The courts

proceeded against them as "combinations in restraint of trade" simply because this fund enabled laborers to maintain themselves against employers. It was not the *combination* but the means adopted by the combination to secure the end desired, that elicited the stamp of disapproval from the courts. But this restriction has been set aside by statute.

Strike pay is never granted to members unless called out by the proper officer, in resistance to some condition imposed by the employer upon the laborer, not granted or implied at the time the laborer began work. All such impositions are taken up and discussed in the meetings of the local organization, and then the grievance is embodied in due form and laid before the executive of the union. This officer in turn satisfies himself as to whether the complaint is a justifiable one and if so found, steps are at once taken to settle the difference by arbitration. If this can be accomplished, all well and good; if not, and the matter is deemed of sufficient importance, a strike is ordered.

The most common causes of strikes are a reduction of wages or a refusal to pay higher wages when demanded, or upon the question of hours of labor. In such instances the usual method of procedure is somewhat different although the underlying principle is the same. When a body of men in any particular shop, doing a particular kind of work, makes up its mind that the wages are too low, or the working hours too long, the subject is brought up in a local lodge and discussed pro and con, after which a vote is taken as to whether the case is deserving of any further attention. If it is so decided, the matter is laid before the executive of the union, and he in turn refers it to a committee whose duty it is to investigate the whole subject from top to bottom from a purely disinterested point of view. Their findings are laid before the superior organization, and if it is found that a just cause for a strike exists it is so reported back to the local lodge where a vote is taken as to whether a strike be ordered. If it is thus voted, a strike is ordered, and the responsibility of the strike will rest on the entire organization. Yet, a local lodge or union may strike without the sanction of the head of the

union, in which case the whole responsibility will rest on such local union. But where the entire union is made responsible, the strike may or may not extend over the entire union, depending wholly upon the obstinacy of the employer. If his power of endurance is great, various branches of the union may from time to time be brought into the strike in order to bring as much pressure as possible to bear upon the employer against whom the strike was originally instituted. The way the balance will swing greatly depends upon the relative strength of the two opposing forces. The stronger either party may be the greater the chances are of winning.

The more effectually a union is organized the less danger there is of a strike. There are two reasons for this; first when a local union agitates a strike which has little or no foundation, it is "called off" by the executive of the union; second, a highly organized body of men can, and do maintain their ground without striking. This is especially true where the power of organized labor on the one hand is about equal to that of the employer on the other. In such cases questions in dispute are very often settled by laborers and employers meeting and talking over their differences, or if a satisfactory solution is not arrived at in this way, the subject is often referred to arbitrators where the matter is often settled without further trouble. But where the local union strikes and the responsibility rests upon it alone the chances for success are exceedingly small. This fact together with the method of thoroughly looking into matters in dispute by a superior union mentioned in the last paragraph, serves as a check upon strikes based upon rash or unreasonable demands. Therefore, in a majority of cases it is fair to suppose that strikes are based upon just demands, although some times the methods of securing these demands are unlawful.

In determining whether a strike is advisable, the executive committee always takes into consideration the effect their decision will have upon the union in general, the kind of work done by those agitating the strike, the ability of the employer to accede to their demands, and all other circumstances which may have any bearing upon the case either directly or in-

directly. If the conclusion is reached that those agitating the strike are receiving the same consideration and fair treatment at the hands of their employers as others of their class, a strike is not determined upon. On the other hand if the committee finds that the conditions of the laborers on the points in question are below those in the same class in general, a strike may be ordered; but in no case will a committee recommend a strike because a low skilled or inefficient workman does not receive the same financial consideration as a skilled or efficient one.

Years ago the workmen did not have the patience to compel a peaceable recognition of their right in a long drawnout controversy, and many times they sought their ends arbitrarily and by force. This is no longer true unless it be in the new unions where members have not experienced the disciplinary influence of union society, and have not learned to adapt themselves to the new conditions into which they have been brought.

While labor organizations in some form or other had existed in England for over six hundred years, such institutions were unknown in the United States one hundred and twenty-five years ago. The closing years of the eighteenth century and the dawning ones of the nineteenth was a transition period between the old and the new forms of such unions. New conditions subjected new functions upon trade unions, and the passing away of old conditions rendered former functions useless. A movement of capital began to run parallel to, and take the place of, a movement in labor. It began to be a common occurrence for employers to order strikes and encourage violence in order to injure the business of a competitor. Capital began to be withdrawn from old establishments and invested in new ones.

Owing to the fact that there were no large industrial centers in this country during colonial times and for several years following the Revolution, there was no need of labor unions during that period. At that time we had no great cities nor did we have a large and distinct laboring class to form them as we had later. Previous to 1790 we had but one city of over 40,000 people, and not until fifty years later did we have

a single city of over one half million. Most of the laborers were farmers who owned and tilled their own soil, and whenever they had any hired help it would be perhaps some neighboring farmer's son who would hire out for the season and return home for the winter. This was true in the north, while nothing but slave labor existed in the south where labor unions were scarcely thought of. Manufacturing of clothing was mostly done in the homes. The only artisans were the blacksmiths, carpenters, and shoemakers. All these worked in their own shops independent of employed labor. Everybody worked in his own way and independent of anyone else. The political upheavals of the time directed the attention of the people along the lines of politics, and for that reason the first organizations outside the church were political in their nature and were chiefly designed to promote some man or set of men to positions of public trust. The first occurrence of any importance which would remind one in any way of organized labor was a strike among month. This occurred in 1802. The leader was arrested and committed to jail under the conspiracy law then in force and this ended the strike.

The first unions formed in the United States were simply bands of laborers who performed a particular kind of work, and each organization was wholly independent of every other. In 1803 the "New York Society of Journeymen Shipwrights" was incorporated. This appears to be the first of its kind in this country. Three years later "The House Carpenters" of the city of New York organized. Some time early in the century the "New York Typographical Society" was formed. Mr. Thurlow Weed was a member of this organization, and during his residence in Albany, this institution took advantage of this fact and induced Mr. Weed to prevail upon the legislature in session at the time to grant articles of incorporation to their society. Mr. Weed says that when he presented the subject to that body they were surprised at the idea, and expressed the sentiment that such a thing was without a precedent in the history of the world. Nevertheless he succeeded, and articles of incorporation were duly granted.

A society of the same nature was organized soon afterward in the city of Albany and soon grew to such proportions that in 1821 they considered themselves strong enough to successfully maintain a strike. Accordingly when their employer engaged a man not of their union, a strike was ordered. This is significant as showing that a feeling of unionism pervaded the atmosphere of New York and that the society was an old one and well organized. It was not until 1822 that we have any record of any unions existing outside of New York. In that year the "Columbian Charitable Society of Shipwrights and Caulkers of Boston and Charleston" was organized and soon after was granted a charter by the Massachusetts legislature allowing them to use a seal, to have a benefit fund, to improve machinery in the art of manufacture, etc.

In Mr. Ely's "Labor Movement in America," he says, "Though the first quarter of this century may perhaps be considered a germinal period, preceding the modern labor movement, and preparing the way for it, that movement itself, so far as it is represented by organizations of labor designed to improve their conditions as laborers, may be regarded as beginning with the year 1825, not that any important event divided the history of labor before that period from its subsequent history, but that, a new spirit and a new purpose began to animate the laboring classes. They became more conscious of their existence as a distinct part of the community, and with interests to a certain extent not identical with those of other social classes, and very naturally the idea of class action on a larger scale than heretofore became more familiar to workmen; and from that time forward this idea has been cherished among them. It is easy then to characterize the movement of labor organizations during this first period of their history, in the United States, which may be said to terminate with the beginning of the civil war between the north and south."

Once fairly under way, labor unions sprang up on all sides; and when skilled labor began to form a class distinct from the unskilled laborers, a spirit of national unionism began to unfold itself. This movement was accelerated by the more improved methods of transportation and communication, render-

ing competition more of a national than a local character. Local unions of various places between which communication was comparatively easy, were brought together in a national organization. This led to various national organizations which were sometimes joined together at the top by some federation or other.

Somewhere about the year 1828 labor organizations began the agitation of such questions as "equal distribution of wealth," "down with monopolies," "the oppression of the poor," "the greed of the rich," "opposition to aristocracy," "destruction of class distinction" and many others. The discussion of such questions shows a difference between the old and the new. It also shows a tendency of laborers studying into the questions which affect them with a view to get at the roots of the evil. It is strictly a tendency toward studying their own conditions from an economic point of view.

In their literature, such as pamphlets, newspapers and magazines, they made the following demands: 1. A Homestead law. 2. Women's rights. 3. A bankrupt law. 4. Mechanics lien law. 5. Sunday mails. 6. No imprisonment for debt. 7. The abolition of slavery. 8. Freedom of public lands. 9. Eight hour law. And strange to say, every one of these demands have been acceded to by the national government except that of "women's rights." It is true, some of them have not been granted in the fullest sense of the term, nevertheless they are conceded by statute in one way or another.

Whether the labor organizations are to be credited as the sole factor in bringing about this excellent class of legislation, they surely lent all the support at their command, using all honorable means to secure this end. In order to accomplish all this congress must be reached. This necessitated political agitation which led organized labor to ally itself with the democratic party, and as a result they claimed to have elected Jackson president of the United States. But when they discovered their demands were not being enacted into laws, a labor party was organized and a full ticket was placed in the field. But this did not prove a popular move and the idea began to wane. Nevertheless it had the effect of forcing legislators to study the

questions agitated by laborers, and to accede to their demands as fast as public sentiment could be moulded in their favor.

Before entering upon this new field, Congress instituted a series of investigations into the real conditions of labor. John Quincy Adams in a report to Congress on what he found in the manufacturing districts said, "They are the principalities of the destitute" and "the palaces of the poor." This expression led a mechanic by the name of Seth Luther to conduct a series of investigations along the same lines. In his report he tells of the long hours of labor, low wages, distressed condition of women and children, cruel treatment of employees by unscrupulous masters and so on for several pages. He found working days varying from twelve to sixteen hours. He found in many factories men, women, and children beginning work at four o'clock in the morning and continuing until eight and nine o'clock in the evening throughout the year. As an additional burden many employees were taxed to support the church, and were fined or dismissed for habitual absence. He reports that one boy committed suicide to escape the cruelties to which he was subjected at the hands of his employer. Another deaf and dumb boy came home from work and dropped down apparently dead as the result of a flogging given him by his master. A little girl eleven years old had her leg broken while being flogged. Mr. Luther pictures a most deplorable condition of women and children. Ventilation and sanitation were unknown. He suggested that the repeal of the oppressive combination laws would enable the workmen to work out their own salvation, hinting that the hostility of the general press will be neutralized by the press of labor organizations. This was Adam Smith's idea.

Other influences brought to bear in the solicitation of legislative recognition were the writings and lectures of such men as W. E. Channing. This man, together with others, was in deep sympathy with the laboring men, and always succeeded in securing the ears of lawmakers in their behalf. While being active in securing legal recognition on the one side, he as industriously strove to enable laboring classes to better their own conditions through self exertion on the other. He urged them

to educate themselves as to the cause of their low economic conditions, and better methods of procedure to attain results. He argued that an education was the best safeguard against arbitrary action of employers and urged laborers to accept this remedy for themselves and their posterity. He maintained that the real enemies of society were not to be found among poor workmen, although they were sometimes made tools in the hands of the real enemies. Mr. Channing exerted a powerful influence upon the laboring class. His influence was like a snowball rolling down hill, it increased the farther it proceeded in its course.

These influences led to one of the first steps taken in behalf of labor. This was during the administration of Martin Van Buren. He signed a bill providing that ten hours should constitute a day's work in the United States navy yards and on all government works, and gave directions that the order be enforced. In the same year the city of Baltimore enacted a ten hour law to be applied on all municipal works. In 1852 the factory laborers of Massachusetts secured a reduction of two hours per week. In this way things progressed. The old prejudices began to disappear, and the time soon came when the hostility of employers gave way to a feeling of friendliness. Many even gave their support to labor unions, contributing money, donating halls for their meetings, and, in some instances, refusing to employ non-union men. As an illustration one of the foremost employers of labor in the United States presented a check for \$10,000 to the National Typographical union then in session in the city of Philadelphia.

Public sentiment being thus moulded in their favor, gave labor unions a new impetus to grow. They multiplied in number, as well as membership. New laws continued to be placed upon the statute books in their behalf until the close of the period marked by the civil war. Then a new element enters into the chain of events. Four million slaves were set free and thrust upon the labor market of the world. Strife between white and black labor at once began. New economic problems arose. The currency question again came into prominence. The contrast between riches and poverty were discussed by news-

papers and upon the platform. The dishonest means to gain wealth were criticised far and wide. The importation of "pauper labor" was denounced. The spirit of the time seems to have been one of unrest. During this period of unrest an unprecedented number of labor unions were organized, some of which were the most powerful and influential in our history.

In 1864 the "Brotherhood of the Foot-board," a union of railway engineers, was organized at Indianapolis. In the same year the Cigarmakers National union was instituted; in 1865 the Bricklayers and Masons; in 1868 the Railway Conductor's Brotherhood, at Mendota, Ill.; the United States Wool and Hat Finisher's association, in 1869; the Brotherhood of Locomotive Firemen in 1875; in 1876 the Amalgamated Association of Iron and Steel Workers; the Granite Cutters National union in 1877; the Journeymen Bakers union in 1886; and so the story goes to the end. We have attempted to enumerate only a few typical cases of national unions in which hundreds of local unions were brought together at a vertex. There was scarcely a trade of any importance but what formed a union of some kind or other. While this growth was in progress, there was also a decay. The first, and, at one time one of the strongest organizations to pass out of existence was the Knights of St. Crispan which had at one time about 100,000 members. This organization had an auxiliary known as the Daughters of St. Crispan whose membership fairly rivaled the knights. This order was organized in the interests of the boot and shoe workers and was instrumental in securing the passage of the shorter hour law in Massachusetts in 1874. But with the higher development of the division of labor in the boot and shoe industry, began the decline of the order, and it declined in an inverse ratio with this development. The division of labor made too many interests at stake for one organization to take care of. What was true of the Knights of St. Crispan was also true of the National Labor Union, which at one time had 640,000 members. Yet the decline of this organization was much more rapid than the Knights of St. Crispan, due to "the fatal malady of politics." Nevertheless the eight hour system on all government works and in the navy yards

owes its existence to this once powerful body. Besides this the foundation of the National Bureau of Labor was laid by this body. During Grant's administration an eight hour law was passed and signed by the president. But through the intrigues of politicians, laborers were given to understand that their wages would be decreased in proportion to the number of hours, but that all who worked ten hours would receive full pay. This brought forth such a storm of opposition that the "order was reversed" by President Grant. Nevertheless the law was a dead letter for lack of enforcement. This being the case, in 1872 and 1873 laborers made an unsuccessful attempt to enforce the law by a strike. Again in 1886 the Knights of Labor, then the most powerful labor organization in the world, against the advices of Mr. Powderly made another such attempt to accomplish the same end. While they did not reach the point expected, their action tended to bring about a reduction of hours in many places. This started the ball rolling and it appears as if the eight hour system will ultimately succeed. While this organization appears to be on the decline, it has left its footprints behind. It was one of the first labor unions in America to take up the cause of women. When the factory girls in Massachusetts struck against the harsh and cruel treatment of their employers, the Knights of Labor reached forth a helping hand. They even went so far as to expel from the order men who were known to misuse their wives, and followed them up wherever they went with a statement of the facts and advised employers to have nothing to do with them. While thus directing their attention to the immediate wants of laborers, they were establishing libraries in various places where the organization was represented to prepare workmen to more effectually and peaceably meet future wants. They also established an insurance department whereby laborers' families could receive from \$500 to \$1,000 upon the death of the head of the family. They have instituted one hundred or more establishments of production on the co-operative plan. They have been criticised for having strong socialistic tendencies, but a strict examination of their principles seems to indicate if they have any such tendencies it is kept in the back-ground. It is true some of the leading

members advocate socialism, but a great majority take and advocate the opposite view, or say little or nothing about the subject at all.

Two of the most recent acts which have begun to affect labor before the courts, but which was originally intended to prevent combinations of employers in restraint of trade, are certain clauses in the Interstate Commerce Act and the Anti-Trust Act. Courts are inclined to hold that these laws apply equally to combination of labor, both under certain circumstances being combinations in restraint of trade. To illustrate, in the Northern Pacific strike and the strike against the Pullman Car company, injunctions were issued by the courts to restrain the men in the employ of the railway companies from quitting work; the Northern Pacific railroad was in the hands of the receiver and in the case of the Pullman strike it was claimed the strike was not legal because it interfered with interstate commerce and the carrying of U. S. mails. A bill is now before Congress to exclude labor combinations from the clutches of these two laws but it is doubtful whether the bill will become a law, or if it does, it will probably be ridden with so many amendments that its purpose will be defeated.

But in the Northern Pacific case the injunction part of the proceeding was reversed and in general the American courts have been inclined to destroy combinations among employers on the one hand, and equally inclined to uphold combinations of labor on the other. Courts also, as a rule, have been disposed to enforce labor contracts on the part of employers and not on the part of employees.

Besides the federal laws relating to labor mentioned above, many states have further extended the rights of laborers by statutory law. Massachusetts was the first to take up the subject and others rapidly followed. Maryland has a law copied from the English Act of 1875 mentioned above. While matters are thus rapidly progressing in both England and America, the American laborer in the progress he has made has had no landed class with which to combine as did the English laborer at the beginning of his progress. But the American laborer has had the advantage of the ballot over the English laborer. He

could make his demands and vote for the candidate who would enee in the course which labor unions of England have taken best serve him. To this fact alone may be attributed the differ-gradually toward socialism, and where they have succeeded in securing a representative in Parliament, failure has been recorded. On the other hand, trade unions in the United States have adhered strictly to economic conditions, turning to the wall all questions of socialism, politics, or religion. They seek to educate themselves upon the economic problems of the day and especially along the lines of their work. Their literature is of a strictly high type and their lecture work is far above the average. One of the latest moves which is a step in advance of anything yet taken, is the proposition to establish a trade union college. The purpose of such a college is to train members of the union for the better performance of their duties as laborers, to educate writers and speakers on the subject of labor problems, etc. Every step taken in this direction leads up to a greater degree of intelligence, and a better understanding as to how to meet new conditions in an amicable way, so that the elements of force practiced by the earlier labor organizations will be supplemented by those of peace.

Besides securing shorter hours, better wages, better sanitary conditions, etc., labor unions have materially aided, both directly and indirectly, in transporting a large number of children from the workshop to the schools. The child labor problem is one of the worst with which a community has to deal. It is said that the Amalgamated Wood Workers of New York, Edinburgh and Glasgow struck against the low wages resulting from child labor in a certain place in the United States in 1898.

It is true only a small per cent. of the laborers take part in these organized efforts. Nevertheless every victory they achieve affects the entire body of laborers in the same class in which the victory is won. When they secure a higher wage scale for themselves, they secure it for all in the same class. When they secure shorter hours of labor they secured them for all alike. When, through their efforts, the evil of child labor is reduced, no distinction is made between the children of the members

of labor unions and those of non-unionists. This has been the story from the beginning to the present time and will be continued for some time to come.

This may appear to be a contradiction to what tables III and IV below show. Comparing the wages of the members of labor unions with those of the same class in the "manufacturers" and "skilled laborers," the labor unionist appears to receive the highest wage rate. The reason for this primarily is that in the case of the manufacturers a great amount of child labor is taken into account and tends very materially to lower the average rate of wages, while in the labor union column, child labor is wholly eliminated. Again, while many of the manufacturers and those laborers belonging to the "skilled trades" are members of labor unions, a larger percentage of the work followed by the persons under the labor union class requires a greater degree of intelligence and skill than that followed by the other two classes. Many of the unionists are conductors, engineers, iron moulders, etc., who hold positions of responsibility or places requiring great skill, and as a class, of course, are paid a higher rate of wages, in many instances double and even triple the wages paid to the ordinary laborer.

On the other hand that class of work being done by children needs practically no skill, and a high degree of intelligence is not essential for the work they do. Children working in factories usually come from large families which have no other means of subsistence except daily labor. In such cases where the wage scale of the parent hovers around the point of "minimum of subsistence," the children will be taken out of the school and placed in the shop, where, in many instances, each will do the work of a man at wages which a man cannot afford to accept. This not only tends to throw men out of employment but tends to reduce the sum total of wages paid for labor. Besides this, it tends to deform children both mentally and physically. It deprives them of the much needed early training offered by our public schools so necessary for gaining a livelihood in after life. The arduous labor imposed upon them brings on premature old age and the history of the second generation will be a repetition of the first unless some force is brought to bear to counteract

such a repetition. Such a force is rapidly crystalizing into child labor laws, compulsory education laws, etc.

All questions leading to such results, results attained along the lines of hours of labor per day, wages, child labor, sanitary conditions of workshops, etc., have generally been brought to the attention of legislators by labor unions, and in order to act intelligently upon these subjects, in order to base their actions upon accurate and scientific knowledge of the real condition of labor along these lines, labor bureaus were established. The character of the work done by these bureaus may be best seen by an examination of the various reports.

The response to inquiries sent to labor unions from this bureau has been very liberal. Many labor unions, in answering our inquiries, express their appreciation of the work the labor bureau is trying to accomplish, and voluntarily offer any assistance they are able to render us in our work. Our work is the collection of data relative to the labor status of Wisconsin, under the direction of the state legislature, and the laboring classes as a whole have aided us very materially in this direction.

Nearly all our laws affecting labor directly have either originated among the laborers themselves, or have had their endorsement. The free employment law of Ohio originated in the Cincinnati Federation of labor. Child labor laws have everywhere been accelerated by labor endorsement. The evils of convict labor are beginning to disappear under labor agitation. In fact, labor unions are effectively attacking all the problems surrounding their station in life, and many are the victories which they have won.

The contests which they have lost are, in a majority of instances, due to forces working within the organization. What was once a most powerful union of labor, the Knights of Labor, is scarcely heard of any more. The breaking up and dying out of this institution is primarily due to the many interests which the organization represented, and secondarily, to the influx of politicians.

Laborers soon discovered that the best interests of each individual trade could not be best served by a single organization,

so the usefulness of the Knights of Labor as an educational and economic factor has been displaced by other labor organizations which better represent the interests of each class of trade, and which are being brought together at the vertex by what is known as the American Federation of Labor. These organizations are a legitimate outgrowth of modern, social and industrial conditions. They were organized for the protection of the laboring classes against encroachment upon their rights as sharers in the distribution of wealth which they help to create; and, as said before, "to fit the laboring classes for grappling with social and economic problems as they arise and to arrive at a solution satisfactory to all concerned."

Among the most important of these problems which have arisen in this state among the 74 unions reporting during the period from Feb. 1, to Aug. 1, 1901, over which our investigation extended, were questions of hours per day, daily wages, and questions which are subordinate to these two. During this period there were four strikes for higher wages and one for a reduction in the number of hours for a day's labor. The former were successful, while the latter were unsuccessful. There were also five other disputes between employers and laborers, three of which related to wages and two related to trainmen having regular, instead of irregular hours. All were settled peaceably. Previous to the existence of labor unions, twelve, sixteen and even eighteen hours' work per day were not uncommon; but of the seventy-six unions reporting, the members of sixteen work eight hours per day, ten work nine hours per day, thirty work ten hours per day, and the hours per day of the remaining twenty-six unions vary from five to thirteen according to the nature of the work engaged in.

The table below discloses the fact that all the members of forty of the seventy-six unions reporting have had steady employment for the last six months and those of fifty unions have been employed for the last two months. Between 90 and 99 per cent. of the members of seventeen of the remaining unions work all the time. From twenty-five to seventy-nine per cent. of the members of the remaining unions have work all the time, and they constitute only a small fraction of the whole number.

The period over which this investigation extended was from Feb. 10, to Aug. 10, 1901.

The Cigar Makers' union of Fond du Lac, No. 329, reported business rather dull attributing the cause to the competition of non-union made cigars.

At the time reported the members of the Cigar Makers' union, No. 25, of Milwaukee, were all at work but not for full time.

The Flour Makers' union of Franklin comprises two crews, one working daytime, the other nights.

The Hat Workers' union of Milwaukee reported a strike in which the union was successful. Cause of strike not given.

Iron Moulders' union, No. 166, reported business on the decline. No cause attributed.

The Machinists' union of Kenosha struck for 9 hours per day and were successful for 9 weeks, after which the members returned to the regular ten hours per day.

The Amalgamated Wood Workers, No. 2009, of Racine, have had an increase of about 15 per cent. in wages, brought about by mutual agreement.

The Boot and Shoe Workers, No. 170, of Milwaukee have a few skilled machine operators who receive \$3 per day. Wages have been on the decrease, attributed by the one making the report to the introduction of labor saving machinery. Since the reduction in wages began it has amounted to about 40 per cent. of the whole amount of wages of about $16\frac{2}{3}$ per cent. of the of the whole amount of wages or about $16\frac{2}{3}$ per cent. of the members.

The Carpenters and Joiners, No. 657, of Sheboygan struck for a minimum of $22\frac{1}{2}$ cents per hour and 9 hours per day. At the end of three days the demands of the strikers were granted providing the work already contracted for would be completed at the old rate of wages, and the regular time of 10 hours per day. This agreement affected 97 per cent. of the members.

In addition to the 315 members of the Carpenters' and Joiners' belonging to No. 522 of Milwaukee, there are 80 members belonging to a branch of that organization.

Twenty five members of Bell City Lodge, No. 437, were laid off in August. Reason not reported.

The Amalgamated Sheet Metal Workers, No. 24, of Milwaukee, struck for 25 cents per hour and after two days were successful. Sharp competition is the only thing complained of at present.

The Painters' union, No. 222, of Milwaukee reported that there were three other such unions in the city, the combined membership of all being 350, all of which have plenty of work. The four unions have a central council composed of delegates representing each of the local unions. This council has its regular meetings for the transaction of business pertaining to the unions in general.

The Tailors' union, No. 215, of Madison, reported business good all the year, excepting what is known as "the dull seasons," January and February, and July and August. Business reported to be increasing.

The Locomotive Engineers of No. 536, Langlade division, reported a decrease in the volume of business in the ore district "due to trouble existing between the Amalgamated Association and the Steel Trust."

Ashland division, No. 379, Brotherhood of Locomotive Engineers, reported a dispute between the railroad officials and the members regarding men holding their "regular runs." The question was peaceably settled. A similar question was raised by the Brotherhood of Locomotive Firemen, No. 259, of Ashland, which was settled by conference.

It is a common complaint made by railroad hands that the railroad companies require too many cars to the train, and that, while ten hours are required for a day's work, train men are very often compelled to work as much as 30 hours without stopping.

While the table shows the "highest," "lowest," and "average" wages per day, the figures are not absolute. Many trainmen work by the day, others by the mile, and still others by the month. Therefore, in this particular instance the figures are only relatively correct.

The secretaries of the various Stationary Engineers' unions report that their constitution forbids its members from taking part in any strikes or labor disputes. They are not labor organ-

izations in the strictest sense of the term; their motto is "Learn more—Earn more." Their main object is social and educational advancement.

The Stereotypers' and Electrotypers' union, No. 12, of Milwaukee, were, at the time reported, having a dispute relative to wages, but hoped for a peaceable solution of the question.

The work of the Vessel Loaders varies greatly. At times they will have from several days to a few weeks steady employment, varying from 10 to 16 hours per day, then there will be a time of greater or less duration when they must seek other employment or lay idle. They are paid usually by the hour at about $16\frac{2}{3}$ cents. What has been said of the vessel loaders, is practically true of the longshoremen.

The Longshoremen's Association No. 68. of Marinette struck for higher wages and the difficulty was peaceably settled.

In very few cases were wages reported as on the decline but on the whole were being gradually increased, and in most cases the increase was brought about by conference between employers and employes or voluntarily by employers.

The following table shows the name and location of the organizations reporting, the number of members belonging to each, the range of employment which also indicates range of business, the wages per day, and the number of hours for a day's work.

GENERAL TABLE.

NAME AND NUMBER OF ORGANIZATION.	LOCATION	No. of members.	Per cent. of employment		Daily rate of wages.			Daily hours of labor.
			Last six months.	Last two months.	Lowest.	Highest.	Average.	
Barbers' Union, 139.....	West Superior..	28	100	100	\$3 17	40v'r	\$3 33	12*
Beer Brewers' Union, 9....	Sheboygan.....	80	75	75	80	\$2 12	2 00	9
Boot and Shoe Workers' Union.....	Milwaukee.....	375	90	90	1 25	3 00	2 00	10
Box Makers' Union, 3.....	Milwaukee.....	45	90	99	1 50	3 00	2 50	8†
Brass Moulders' Union, 141.....	Milwaukee.....	60	75	75	1 75	2 25	2 00	10
Brewers' and Malsters' Union, 81.....	La Crosse.....	55	90	90	2 00	2 65	2 30	10
Brewers' Union, 107.....	Green Bay.....	55	100	100	1 80	2 20	2 00	10
Brewery Workmen, 90.....	Oshkosh.....	20	100	100	2 17	2 33	2 25	10
Butchers' Union, 86.....	Oshkosh.....	45	100	100	1 67	2 50	2 00	10
Carpenters' Union, 161.....	Kenosha.....	53	20	95	1 50	3 00	2 50	9
Carpenters' Union, 311.....	Madison.....	40	100	100	1 50	3 00	2 25	10
Carpenters' Union, 657.....	Sheboygan.....	100	25	100	2 00	2 00	2 00	9
Carpenters' Union, 522.....	Milwaukee.....	315	90	87	2 00	2 60	2 40	8
Cigar Makers' Union, 215.....	Ashland.....	53	100	100	2 50	4 50	3 00	8
Cigar Makers' Union, 31.....	Chippewa Falls..	26	100	100	1 00	2 75	2 00	8
Cigar Makers' Union, 329.....	Fond du Lac.....	40	80	80	1 00	2 75	2 00	8
Cigar Makers' Union, 169.....	Green Bay.....	44	95	100	1 65	4 00	2 25	8
Cigar Makers' Union, 290.....	Janesville.....	27	10	100	1 50	2 50	2 00	8
Cigar Makers' Union, 61.....	La Crosse.....	54	90	90	1 10	1 65	1 40	3
Cigar Makers' Union, 287.....	Marinette.....	30	100	100	Piece work		2 25	8
Cigar Makers' Union, 25.....	Milwaukee.....	381	50	75	Piece work		1 50	8
Cigar Makers' Union.....	Neenah.....	25	100	100	1 30	3 00	2 15	8
Cigar Makers' Union, 166.....	Oshkosh.....	79	100	100	1 00	2 00	1 60	8
Coopers' Union, 13.....	Green Bay.....	50	100	100	1 65	1 65	1 65	8
Coopers' Union, 85.....	La Crosse.....	38	100	100	2 00	2 00	2 00	10
Coopers' Union, 35.....	Milwaukee.....	120	100	100	1 50	3 00	2 25	10
Flour Millers' and Laborers' Union.....	Franklin.....	7	100	100		1 50		12
Hat Workers' Union.....	Milwaukee.....	100	100	100	Piece work		1 40	10
Iron Moulders' Union, 214.....	Neenah.....	40	100	100	1 75	4 25	3 75	10
Iron Moulders' Union, 166.....	Milwaukee.....	85	80	80	1 50	3 50	2 50	11 to 12
Lath Handlers' Union, 141.....	Marinette.....	60	100	100	1 75	2 00	1 85	10
Leather Workers' Union.....	Milwaukee.....	40	100	100	1 15	3 25	1 75	10
Locomotive Engineers, 536.....	Antigo.....	41	100	100	2 75	4 80	3 50	10
Locomotive Engineers, 379.....	Ashland.....	51	90	90	2 75	4 00	3 50	10 to 11
Locomotive Engineers, 297.....	Green Bay.....	58	100	100	3 50	4 25	3 70	5 to 12
Locomotive Firemen, 259.....	Ashland.....	42	90	100	1 75	2 50	2 25	10
Locomotive Firemen, 26.....	Baraboo.....	120	100	100	2 20	2 60	2 40	10
Locomotive Firemen, 412.....	Fond du Lac.....	80	100	100	1 75	2 40	2 15	10
Locomotive Firemen, 131.....	Stevens Point....	30	100	100	2 20	2 45	2 30	10
Long Shoremen's Association.....	West Superior..	100	Work	all done by hr.			Uncertain.	
Machinists' Union.....	Kenosha.....	65	90	90	2 25	3 00	2 50	10
Machinists' Union, 437.....	Racine.....	55	90	50	2 00	2 65	2 25	9-10
Painters' Union, 177.....	Janesville.....	38	100	100	1 60	2 00	1 75	10
Painters' Union, 222.....	Milwaukee.....	50	100	100	2 20	2 40	2 30	8
Painters' Union, 103.....	Racine.....	63	95	100	2 25	2 50	2 35	8
Painters' Union, 3.....	Sheboygan.....	60	90	80	1 80	1 80	1 80	9
Plumbers' Union.....	Racine.....	19	100	100	2 25	3 00	2 85	8
Printing Pressmen's Union, 53.....	West Superior..	13	100	100	2 00	3 00	2 70	9
Railway Conductors' Order, 253.....	Ashland.....	51	100	100	3 00	3 00	3 00	10
Railway Conductors' Order.....	Baraboo.....	61	100	100	3 00	3 00	3 00	11
Railway Conductors' Order.....	La Crosse.....	89	100	100	3 00	3 00	3 00	10
Railway Trainmen, 303.....	Ashland.....	73	100	100	2 00	3 00	2 50	10

* Except Saturday, 16..

† Except Saturday, 5.

GENERAL TABLE — Continued.

NAME AND NUMBER OF ORGANIZATION.	LOCATION.	No. of members.	Per cent. of employment.		Daily rate of wages.			Daily hours of labor.
			Last six months.	Last two months.	Lowest.	Highest.	Average.	
Railway Trainmen, 357 ..	Fond du Lac	55	100	100	\$2 00	\$3 00	\$2 50	10
Railway Trainmen, 176 ..	La Crosse	57	90	95	2 00	3 00	2 50	10
Sheet Metal Workers, 24 ..	Milwaukee	103	100	100	2 00	3 00	2 50	8
Stationary Engineers, 19 ..	Green Bay	26	100	100	1 75	3 00	2 25	10-12
Stationary Engineers, 13 ..	Kenosha	17	100	100	1 75	3 50	2 50	12
Stationary Engineers, 18 ..	Milwaukee	67	95	95	2 50	3 00	2 75	8-12
Stationary Engineers, 1 ..	Milwaukee	107	98	98	1 50	3 50	2 25	8-13
Stationary Engineers, 2 ..	Sheboygan	25	100	100	2 00	4 00	3 00	10
Stereotypers and Electrotypers, 12 ..	Milwaukee	33	90	90	2 00	5 00	3 00	9
Tailors' Union, 215	Madison	50	95	95	1 50	2 50	1 85	10-12
Typographical Union, 248 ..	Sheboygan	14	100	100	1 30	1 60	1 40	10
Typographical Union, 23 ..	Milwaukee	310	98	95	2 50	4 00	3 25	8-9
Vessel Loaders' Union ..	Washburn	85					1 80	
Vessel Loaders' Union, 145 ..	Allouez	22	100	100	1 50	2 50	2 00	10
Vessel Loaders' Union, 131 ..	West Superior	100						
Vessel Loaders' Union, 68 ..	Marinette	102	100	100	2 25	2 20	2 20	10
Vessel Loaders and Ore Trimmers, 54 ..	Ashland	44	93	95	1 40	3 10	2 25	
Wood Workers' Union, 82 ..	Marshfield	50	80	90	1 05	1 65	1 25	10
Wood Workers' Union, 8 ..	Milwaukee	300	90	100	1 65	2 70	2 00	9
Wood Workers' Union, 53 ..	Sheboygan	17	82	100	70	1 30	1 00	10-10½
Wood Workers' Union (carvers) ..	Milwaukee	35	85	85	1 60	2 50	2 15	9
Wood Workers' Union, 115 ..	Milwaukee	21	130	100	1 65	2 00	1 80	9
Wood Workers' Union, 2009 ..	Racine	30	100	100	50	2 25	1 50	10
Total number men ..		5,930						

The following table exhibits the number of men, the number of hours each man works, together with average wages each person receives per hour.

TABLE I.

Number of men.	Per cent. of whole number men.	Hour work per day.	Average wages for each person per hour.
1,406	26.33	8	\$.25½
727	13.61	9	.23½
2,052	38.50	10	.22½
61	1.14	11	.27½
52	.98	12	.18½
158	1.09	5-12	.35
2645	12.10	8-13	.27
329	6.17	Not given	.....

¹ Engineers.² Engineers, Typographical workers, Machinists, and Iron Moulders.

The above exhibit will be easily understood by reference to the first table in this series.

About one-fourth the members work eight hours, and two-fifths work ten hours per day. This practically includes all the members whose work is regular day work. A little over one eighth of the whole number work nine hours, and about two per cent. work from eleven to twelve hours per day. The remainder, about one-sixth of the whole number, belong to that class of workers whose occupations are irregular. They work from five to thirteen hours per day. The most of them are engineers, boat-loaders, etc.

Table II is a classification of weekly earnings, and is as follows:

CLASSIFICATION OF WEEKLY EARNINGS, BASED UPON THE AVERAGE RATE OF DAILY WAGES.

TABLE II.

Classification.	Number of men.	Percentage.
\$25 per week and over	00	00
20.00 but under \$25.00	192	3.99
18.00 but under 20.00	622	12.92
15.00 but under 18.00	696	14.25
13.00 but under 15.00	1,263	26.28
12.00 but under 13.00	1,303	27.06
11.00 but under 12.00	110	2.28
10.00 but under 11.00	244	5.06
9.00 but under 10.00	159	3.30
8.00 but under 9.00	168	3.48
7.00 but under 8.00	50	1.03
6.00 but under 7.00	17	.35
Under \$6.00	00	00
Total	4,814	100.00

Not counted on account of averages, wages not being given, 516 men.

The above table tells the wage story of the organizations included in the report, giving the number of persons in the various classes and the percentage each number bears to the whole. No one appears to have received "\$25.00 per week and over, while 192 or 3.99 per cent. receive "\$20.00 but under \$25.00." From this on to class "\$12.00 but under \$13.00," the number increases to 1,303 or 27.06 per cent. Then in the next class the number drops to 110 or 2.28 per cent., and

again to 244 or 5.06 per cent.; then again there is a decrease to 159 or 3.3 per cent. in the following class and another increase to 168 receiving \$8.00 but under \$9.00, and from here to the end the number decreases to 0 in the class "under \$6."

The following table is a comparison of the Weekly earnings and number of men of the Labor Unions with fourteen Skilled Trades and Manufacturers.

TABLE III.

Classification of weekly earnings.	72 labor unions for 1901.	14 skilled trades for 1899.	Manufacturers for 1900.
Under \$5.00 per week .....	.....	838	7,202
\$5.00 but under \$6.00 .....	.....	490	2,489
6.00 but under 7.00	17	86	5,995
7.00 but under 8.00	50	1,206	9,975
8.00 but under 9.00	168	1,444	12,053
9.00 but under 10.00	159	4,044	15,983
10.00 but under 12.00	354	3,296	12,079
12.00 but under 15.00	2,566	3,516	10,021
15.00 but under 20.00	1,308	1,757	5,910
20.00 and over	192	362	2,030
Totals	4,814	17,739	83,737

The preceding table is made up of the fourteen skilled trades as exhibited in the Bureau of Labor Statistics' report for Wisconsin 1899-1901, and the Labor Union's returns and Manufacturers' returns for 1900.

The first class in order is that of "under \$5.00 per week." In this class there are 7,202 manufacturers, 838 skilled laborers, and no union men. In the next class there are 2,489 manufacturers, 490 skilled laborers, and no union men receiving "\$5.00 but under \$6.00" per week. From this on to the class "\$9.00 but under \$10.00" the manufacturers increased steadily to 15,983, and the skilled laborers to 4,044. From this on to the class "\$20.00 and over" the manufacturers decrease to 2,030, while the skilled laborers decrease to 3,296 in "\$10.00 but under \$12.00, then increase to 3,516 in class "\$12.00 but under \$15.00," then decrease to 362 in class "\$20.00 and over." The labor unions begin with 17 in class "\$6.00 but under \$7.00" and increase to 168 in class "\$8.00

but under \$9.00," then decrease to 159 in the next class, increasing again to 2,566 in class "\$12.00 but under \$15.00," then decreasing to 192 in the last class. As a whole the exhibit makes plain the earnings of the three classes.

What the above table shows in actual numbers, the following shows in percentages based upon the total in each class.

TABLE IV.

Classification of weekly earnings.	72 labor unions for L.O.L. Percentage.	14 skilled trades for 1899. Percentage.	Manufacturers for 1900. Percentage.
Under \$5.00 per week .....	.....	4.73	8.60
\$5.00 but under \$6.00 .....	.....	2.77	2.97
6.00 but under 7.00 .....	.35	4.55	7.16
7.00 but under 8.00	1.03	6.80	11.91
8.00 but under 9.00	3.48	8.15	14.39
9.00 but under 10.00	3.30	22.80	19.09
10.00 but under 12.00	7.34	18.53	14.43
12.00 but under 15.00	53.34	19.83	11.97
15.00 but under 20.00	27.17	9.80	7.06
20.00 and over	3.99	2.04	2.42
Totals	100.00	100.00	100.00

This table, as hinted above shows the per cent. of persons in each class. 4.73 per cent. of the skilled laborers, 8.60 per cent. of the manufacturers, and no union laborers, receive less than \$5.00 per week. In class "\$5.00 but under \$6.00" there are 2.77 per cent. of the skilled laborers and 2.97 per cent. of the manufacturers, and no union men. From this point on to class "\$9.00 but under \$10.00" the skilled laborers increase to 22.80 per cent. and the manufacturers to 19.09 per cent. From this point on to the last class the manufacturers decrease to 2.42 per cent. and the skilled laborers decrease to 18.53 per cent. in class "\$10.00 but under \$12.00," then increase to 19.83 per cent. in the next class, then gradually decrease to 2.04 per cent. in the last class.

The labor unions begin with .35 per cent. in class three and increase to 3.48 per cent. in the fifth class, after which it decreases to 3.30 per cent. in the sixth class and again increases rapidly to 53.34 per cent. in class "\$12.00 but under \$15.00." From this point the per cent. decreases to 3.99 in class "\$20.00 and over."

Everything considered the above table tells the complete story as nearly as figures can be made to do so. Over one-half of the union men receive from \$12 to \$15 per week while less than one-fifth of the skilled laborers and less than one-eighth of the manufacturers belong to this class. The greatest number of manufacturing laborers and skilled laborers receive less than \$10.00 per week.

PART IX.

Manufacturers' Returns for 1900 and 1901.

In this part is presented in compiled form the financial reports for 1900 and 1901 of 1,135 identical manufacturing establishments in this state. These reports have been classified into 42 industries and so compiled that the facts for each of these industries are presented in a separate table. The basic presentations thus consist of 42 tables, or one for each industry. These tables in turn have been combined in one summary table, which thus includes the facts for all industries. Each table is divided in three main parts, the first of which shows the "Classified Weekly Earnings;" the second the "Number of Persons Employed by Months;" and the third showing "Other Presentations."

CLASSIFIED WEEKLY EARNINGS.

Under this head is shown, for each industry separately and for all industries when combined, the number of persons in the employ of the establishments reporting who received classified weekly earnings. As this statement implies, the persons included were classified according to the amount of their earnings; and the classifications into which they were thus divided are 10 in number. The first classification in order, when reading down in the table, includes all persons whose weekly wages when employed full time amounted to less than \$5 per week. The sec

ond class included all who received \$5 per week but under \$6. From this point on there is one class for each one dollar increase in the earnings up to the point where the earnings just fall below \$10 per week, making in all six classes below this amount. The seventh class in order includes all who received \$10, but under \$12; the eighth those of \$12, but under \$15; the ninth class those of \$15, but under \$20; and the tenth all those who received \$20 per week and over. The male and female persons in each class are also shown separately, and the per cent. of the number of both of the total persons employed have been computed and given. On the whole this part of the tables can perhaps be said to present a fairly good picture of the conditions as to earnings in the various industries.

NUMBER OF PERSONS EMPLOYED BY MONTHS.

In this part of the tables is shown by industries, the average number of persons employed each month in 1900 and 1901. In this part is also shown the range of employment or unemployment from month to month throughout each year. The range of employment or unemployment has been computed from the number employed, and the way in which it was done is quite simple. The number for the month during which the greatest number were employed was regarded as full employment, or 100, and the number of persons for the other months were regarded in their portion to the greatest number. By full employment is not meant that all persons wanting work were then employed, but simply this, that all persons who could find something to do in a given line were then at work. While the figures are thus not an absolute measure of the course of employment they certainly shed a great deal of light upon it.

OTHER PRESENTATIONS.

Under this head in the tables are found a variety of facts. In the first place it shows the smallest, greatest, and average number of persons employed together with increase or decrease as the case may be in the latter year when compared with the former. Then again it gives the average yearly earnings to each person

employed, and the average number of days in operation by each establishment with comparisons as between the two years. The respective number of private firms and corporations together with the number of partners and stockholders are also given in this part for both years. It further shows the amount of capital invested, the value of the goods made or the work done, the total amount paid as wages, the average amount of capital and the average product to each person employed together with comparisons.

The establishments included in this part cover about 60 per cent. of the productive capacity of all the manufacturing establishments in the state. The figures were carefully edited and compiled and it is believed that they truthfully set forth the condition in our manufacturing industries during the period covered.

AGRICULTURAL IMPLEMENTS—29 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1900				1901			
	Male.	Fe-male.	TOTAL.		Male.	Fe-male.	TOTAL.	
			No.	Pr ct.			No.	Pr ct.
Under \$5.00	157	.....	157	4.24	150	.....	150	4.02
\$5.00 but under \$6.00	67	.....	67	1.81	59	.....	59	1.58
6.00 but under 7.00	322	.....	322	8.69	318	.....	318	8.51
7.00 but under 8.00	603	.....	603	16.28	596	.....	596	15.96
8.00 but under 9.00	601	.....	601	16.22	329	.....	329	8.80
9.00 but under 10.00	585	.....	586	15.82	698	.....	698	18.19
10.00 but under 12.00	387	.....	387	10.44	478	.....	478	12.79
12.00 but under 15.00	550	.....	550	14.84	583	.....	583	15.60
15.00 but under 20.00	340	.....	340	9.18	373	.....	373	9.98
20.00 and over	92	.....	92	2.48	152	.....	152	4.07
Total	3,705	.....	3,705	100.00	3,736	.....	3,736	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGE OF—			
			Employment.		Unemployment.	
	1900.	1901	1900.	1901.	1900.	1901.
January	3,341	3,153	95.92	88.74	4.08	11.26
February	3,483	3,516	100.00	98.96	.....	1.04
March	3,473	3,553	99.71	100.00	.29	.....
April	3,107	3,210	89.20	90.35	10.80	9.65
May	2,856	2,820	81.99	79.37	18.01	20.63
June	2,733	2,517	78.47	70.84	21.53	29.16
July	2,098	2,090	60.23	58.82	39.77	41.18
August	1,633	1,799	46.88	50.63	53.12	49.37
September	1,355	1,463	36.03	41.18	63.97	58.82
October	1,522	2,096	43.70	58.99	56.30	41.01
November	1,704	2,552	48.92	71.87	51.08	28.13
December	2,433	2,899	69.85	81.59	30.15	18.41

3. Other Presentations.

CLASSIFICATION.	1900.	1901.	INCREASE OR DECREASE IN 1901.		
			Amount.	Pct.	
Smallest No. of persons employed..	1,355	1,463	+	108	7.97
Greatest No. of persons employed..	3,483	3,553	+	70	2.01
Average No. of persons employed..	2,478	2,629	+	161	6.50
Average yearly earnings	\$556	\$570	+	\$14	2.52
Average time in operation, days.....	271	272	+	1	.37
No. of private firms	9	9	.....	.....	.....
No. of male partners	12	13	+	1	8.33
No. of female partners .....	.....	.....	.....	.....	.....
Total No. of partners	12	13	+	1	8.33
No. of corporations	20	20	.....	.....	.....
No. of male stockholders	170	175	+	5	2.94
No. of female stockholders	45	46	+	1	2.22
Total No. of stockholders	215	221	+	6	2.79
Total No. of partners and stockholders	227	234	+	7	3.08
Amount of capital invested.....	\$13,264,129 07	\$13,641,159 70	+	\$377,020 63	2.84
Value of goods made or work done	7,606,108 15	7,613,868 24	+	7,760 09	.11
Amount paid as wages	1,551,223 41	1,504,974 33	—	46,249 08	2.98
Av. capital to each person employed	5,352 76	5,169 06	—	183 70	3.43
Av. product to each person employed	3,069 45	2,885 15	—	84 30	6.00

ARTISANS' TOOLS—15 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1900				1901			
	Male.	Fe-male.	TOTAL.		Male.	Fe-male.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	93		93	16.52	76		76	12.28
\$5.00 but under \$6.00	35		35	6.22	30	1	31	5.01
6.00 but under 7.00	48	1	49	8.70	31		31	5.01
7.00 but under 8.00	37		37	6.57	39		39	6.30
8.00 but under 9.00	76		76	13.50	87		87	14.05
9.00 but under 10.00	73		73	12.97	74		74	11.95
10.00 but under 12.00	48		48	8.52	63		63	10.18
12.00 but under 15.00	70		70	12.43	105		105	16.96
15.00 but under 20.00	72		72	12.79	108		108	17.45
20.00 and over	10		10	1.78	5		5	.81
Total	562	1	563	100.00	618	1	619	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO OF PERSONS EMPLOYED.		PERCENTAGE OF—			
			Employment.		Unemployment.	
	1900.	1901.	1900.	1901.	1900.	1901.
January	527	531	91.49	88.21	8.51	11.79
February	576	553	100.00	91.86		8.14
March	568	591	98.61	98.17	1.39	1.83
April	534	592	92.71	98.34	7.29	1.06
May	566	569	98.26	94.52	1.74	5.48
June	505	564	87.67	93.69	12.33	6.31
July	514	556	89.24	92.36	10.76	7.64
August	493	574	85.59	95.35	14.41	4.65
September	479	583	83.16	96.84	16.84	3.16
October	513	569	89.06	94.52	10.94	5.48
November	511	602	88.72	100.00	11.28	
December	522	538	90.63	89.37	9.37	10.63

3. Other Presentations.

CLASSIFICATION.	1900.	1901.	INCREASE OR DECREASE IN 1901.	
			Amount.	Pr ct.
Smallest No. of persons employed	479	531 +	52	10.86
Greatest No. of persons employed	576	602 +	26	4.51
Average No. of persons employed	526	569 +	43	8.17
Average yearly earnings	\$426.03	\$434.15 +	\$8.12	1.91
Average time in operation	280.93	300.47 +	19.54	6.96
No. of private firms	10	9 -	1	10.00
No. of male partners	18	17 -	1	5.56
No. of female partners				
Total No. of partners	18	17 -	1	5.56
No. of corporations	5	6 +	1	20.00
No. of male stockholders	11	19 +	8	72.73
No. of female stockholders				
Total No. of stockholders	11	19 +	8	72.73
Total No. of partners and stockholders	32	36 +	4	12.50
Amount of capital invested	\$545,699.88	\$680,170.74 +	\$134,470.86	24.64
Value of goods made or work done	654,689.88	753,200.26 +	98,510.38	15.05
Amount paid as wages	224,093.72	247,039.57 +	22,945.85	10.24
Av. capital to each person employed	1,037.45	1,195.38 +	157.93	15.22
Av. product to each person employed	1,244.66	1,322.73 +	78.07	6.35

BEEF AND PORK PACKING—9 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1900				1901			
	Male.	Fe-male.	TOTAL.		Male.	Fe-male.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	76	2	78	4.36	55	1	56	3.35
\$5.00 but under \$6.00	22	2	24	1.35	42	1	43	2.57
6.00 but under 7.00	193	2	195	10.89	78	.....	78	4.67
7.00 but under 8.00	494	.....	494	27.60	277	.....	277	16.56
8.00 but under 9.00	385	.....	385	21.50	486	1	487	29.13
9.00 but under 10.00	198	.....	198	11.06	274	.....	274	16.59
10.00 but under 12.00	211	.....	211	11.79	314	.....	314	18.78
12.00 but under 15.00	102	.....	102	5.70	97	.....	97	5.80
15.00 but under 20.00	98	.....	98	5.47	39	.....	39	2.33
20.00 and over	5	.....	5	28	7	.....	7	.42
Total	1,784	6	1,790	100.00	1,669	3	1,672	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGE OF—			
			Employment.		Unemployment.	
	1900.	1901.	1900.	1901.	1900.	1901.
January	1,745	1,630	100.00	99.51	.....	.49
February	1,433	1,456	82.12	88.89	17.88	11.11
March	1,252	1,279	71.75	78.08	28.25	21.92
April	1,141	1,117	65.39	68.19	34.61	31.81
May	1,192	1,175	68.31	71.79	31.69	28.21
June	1,399	1,303	80.17	79.54	19.83	20.46
July	1,381	1,206	79.14	73.67	20.86	26.43
August	1,256	1,203	71.98	73.44	28.02	26.56
September	1,225	1,226	70.20	75.46	29.80	24.54
October	1,428	1,331	81.83	81.26	18.17	18.74
November	1,597	1,607	91.52	98.11	8.48	1.89
December	1,731	1,638	99.20	100.00	.80	.....

3. Other Presentations.

CLASSIFICATION.	1900.	1901.	INCREASE OR DECREASE IN 1910.	
			Amount.	Prct.
Smallest No. of persons employed	1,141	1,117	—	24
Greatest No. of persons employed	1,745	1,638	—	107
Average No. of persons employed	1,398	1,348	—	50
Average yearly earnings	\$424 44	\$435 32	+	\$10.88
Average time in operation, days ...	288	234	—	4
No. of private firms	4	4	.....	.....
No. of male partners	13	13	.....	.....
No. of female partners	1	1	.....	.....
Total No. of partners	14	14	.....	.....
No. of corporations	5	5	.....	.....
No. of male stockholders	26	37	+	1
No. of female stockholders	3	3	.....	.....
Total No. of stockholders	29	40	+	1
Total No. of partners and stockholders	53	54	+	1
Amount of capital invested	\$2,741,940 67	\$2,849,380 49	+	\$107,439 83
Value of goods made or work done	13,247,159 65	16,189,923 05	+	2,942,763 40
Amount paid as wages	593,360 59	586,809 29	—	6,551 30
Av. capital to each person employed	1,961 33	2,113 78	—	152 45
Av. product to each person employed	10,906 41	12,009 85	+	1,103 44

BOOTS AND SHOES—28 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1900				1901			
	Male.	Fe-male.	TOTAL.		Male.	Fe-male.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	374	571	945	35.03	458	450	908	32.28
\$5.00 but under \$6.00	79	131	210	7.78	92	128	220	7.82
6.00 but under 7.00	99	109	208	7.71	120	103	223	7.93
7.00 but under 8.00	120	62	172	6.57	126	72	198	7.04
8.00 but under 9.00	137	48	185	6.86	112	63	175	6.22
9.00 but under 10.00	332	27	359	13.31	247	43	290	10.36
10.00 but under 12.00	205	19	224	9.04	199	50	249	8.85
12.00 but under 15.00	170	18	188	6.97	227	22	249	8.85
15.00 but under 20.00	134	6	140	5.19	159	4	163	5.90
20.00 and over	46	1	47	1.74	37	1	38	1.35
Totals	1,696	1,002	2,698	100.00	1,877	936	2,813	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGE OF—			
			Employment.		Unemployment.	
	1900.	1901.	1900.	1901.	1900.	1901.
January	2,545	2,556	100.00	94.21	.....	5.79
February	2,494	2,562	98.00	94.43	2.00	5.57
March	2,523	2,559	99.13	94.32	.87	5.69
April	2,406	2,410	94.54	88.83	5.46	11.17
May	2,224	2,545	87.19	93.82	12.61	6.18
June	2,395	2,565	94.11	94.54	5.89	5.46
July	2,433	2,633	95.60	97.05	4.40	2.95
August	2,480	2,713	97.45	100.00	2.55	.....
September	2,577	2,637	99.69	97.20	.31	2.80
October	2,445	2,682	96.07	94.86	3.93	1.14
November	2,402	2,605	94.38	96.02	5.62	3.98
December	2,435	2,544	95.68	93.77	4.32	4.23

3. Other Presentations.

CLASSIFICATION.	1900.	1901.	INCREASE OR DECREASE IN 1901.	
			Amount.	Pct.
Smallest No. of persons employed	2,224	2,410	+	186
Greatest No. of persons employed	2,545	2,713	+	168
Average No. of persons employed	2,443	2,584	+	141
Average yearly earnings	\$342.06	\$324.46	—	\$7.60
Average time in operation, days	281	280	—	1
No. of private firms	10	10	.....	.....
No. of male partners	25	26	+	1
No. of female partners .....	.....	.....	.....	.....
Total No. of partners	25	26	+	1
No. of corporations	18	18	.....	.....
No. of male stockholders	147	148	+	1
No. of female stockholders	18	20	+	2
Total No. of stockholders	165	169	+	4
Total No. of partners and stockholders	190	195	+	5
Amount of capital invested	\$2,301,379.52	\$2,437,245.33	+	\$135,865.81
Value of goods made or work done	4,302,105.48	4,629,859.96	+	327,754.48
Amount paid as wages	835,653.76	864,240.23	+	28,586.47
Av. capital to each person employed	942.02	943.21	+	1.18
Av. product to each person employed	1,760.99	1,791.74	+	30.75

PACKING BOXES—20 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1900				1901			
	Male.	Fe-male.	TOTAL.		Male.	Fe-male.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	302	35	337	26.94	272	37	309	26.57
\$5.00 but under \$6.00	71	5	76	6.07	46	5	51	4.38
6.00 but under 7.00	116	.....	116	9.27	91	7	98	8.43
7.00 but under 8.00	194	.....	194	15.51	158	.....	158	13.59
8.00 but under 9.00	122	.....	122	9.75	147	.....	147	12.64
9.00 but under 10.00	222	.....	222	17.75	172	.....	172	14.79
10.00 but under 12.00	93	.....	93	7.43	125	.....	125	10.75
12.00 but under 15.00	54	.....	54	4.32	69	.....	69	5.93
15.00 but under 20.00	26	.....	26	2.08	27	.....	27	2.32
20.00 and over	11	.....	11	.88	7	.....	7	.60
Total	1,211	40	1,251	100.00	1,114	49	1,163	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGE OF—			
			Employment.		Unemployment.	
	1900.	1901.	1900.	1901.	1900.	1901.
January	973	941	90.60	83.27	9.40	16.73
February	903	944	84.08	83.54	15.92	16.46
March	987	981	91.89	86.81	8.11	13.19
April	1,027	1,031	95.62	91.24	4.38	8.76
May	1,053	1,067	98.04	93.54	1.96	6.46
June	1,074	1,099	100.00	97.26	.....	2.74
July	1,052	1,120	97.95	100.00	2.05	.....
August	1,030	1,103	95.90	97.61	4.10	2.39
September	995	1,078	92.64	95.40	7.36	4.60
October	963	1,028	89.66	90.97	10.34	9.03
November	966	1,011	89.94	89.49	10.06	10.51
December	1,012	987	94.23	87.35	5.77	12.65

3. Other Presentations.

CLASSIFICATION.	1900.	1901.	INCREASE OR DECREASE IN 1901.	
			Amount.	Prct.
Smallest No. of persons employed	903	941	+	38
Largest No. of persons employed	1,074	1,130	+	56
Average No. of persons employed	1,003	1,033	+	30
Average yearly earnings	\$352 31	\$349 75	—	\$2 56
Average time in operation, days	262	279	+	17
No. of private firms	10	9	—	1
No. of male partners	22	17	—	5
No. of female partners .....	.....	1	+	1
Total No. of partners	22	18	—	4
No. of corporations	10	11	+	1
No. of male stockholders	45	41	—	4
No. of female stockholders	8	8	.....	8.89
Total No. of stockholders	53	49	—	4
Total No. of partners and stockholders	75	67	—	8
Amount of capital invested	\$1,152,520 60	\$1,158,403 39	+	\$5,882 79
Value of goods made or work done	1,521,277 76	1,744,780 57	+	223,502 81
Amount paid as wages	353,363 88	361,289 32	+	7,925 44
Av. capital to each person employed	1,149 07	1,121 39	—	27 68
Av. product to each person employed	1,516 73	1,689 04	+	172 31

BREWERIES—72 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1900				1901			
	Male.	Fe-male.	TOTAL.		Male.	Fe-male.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	256	528	784	20.18	258	511	769	17.17
5.00 but under 6.00	52	202	254	6.64	44	216	260	6.80
6.00 but under 7.00	182	1	183	4.71	157	1	158	3.53
7.00 but under 8.00	106	1	107	2.75	146	1	147	3.28
8.00 but under 9.00	121	.....	121	3.12	147	.....	147	3.28
9.00 but under 10.00	245	.....	245	6.31	243	.....	243	5.42
10.00 but under 12.00	330	1	331	8.52	674	.....	674	15.04
12.00 but under 15.00	1,198	50	1,248	32.11	1,499	50	1,549	34.58
15.00 but under 20.00	574	.....	574	14.78	487	.....	487	10.87
20.00 and over	38	.....	38	.98	46	.....	46	1.03
Total	3,102	783	3,885	100.00	3,701	779	4,480	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
			1900.	1901.	1900.	1901.
January	3,516	3,638	90.04	71.31	9.96	28.69
February	3,478	3,650	89.07	71.54	10.93	28.46
March	3,663	3,885	93.80	76.15	6.20	23.85
April	3,699	4,013	94.72	73.66	5.28	21.34
May	3,748	3,921	95.98	76.86	4.02	23.15
June	3,906	4,221	100.00	82.73	.....	17.27
July	3,882	4,636	99.41	90.87	.59	9.13
August	3,883	5,102	99.44	100.00	.56	.....
September	3,902	4,673	99.92	89.63	.08	10.37
October	3,651	4,122	93.50	80.79	6.50	19.21
November	3,523	3,932	90.35	77.07	9.65	22.93
December	3,462	3,868	88.66	75.81	11.34	24.19

3. Other Presentations.

CLASSIFICATION.	1900.	[1901.	INCREASE OR DECREASE IN 1901.	
			Amount.	Pct.
Smallest No. of persons employed	3,462	3,638	+ 176	5.08
Greatest No. of persons employed	3,906	5,102	+ 1,197	30.65
Average No. of persons employed	3,693	4,130	+ 437	11.83
Average yearly earnings	\$508.30	\$494.13	- \$14.17	2.79
Average time in operation, days	312	315	+ 3	.96
No. of private firms	33	33	.....	.....
No. of male partners	48	50	+ 2	4.17
No. of female partners	2	.....	-	100.00
Total No. of partners	50	50	.....	.....
No. of corporations	39	39	.....	.....
No. of male stockholders	425	369	- 56	13.18
No. of female stockholders	84	90	+ 6	7.09
Total No. of stockholders	509	459	- 50	9.82
Total No. of partners and stockholders	559	509	- 50	8.94
Amount of capital invested	\$40,345,373.93	\$11,870,505.46	+ \$1,525,131.53	3.78
Value of goods made or work done	23,096,905.21	23,447,987.24	+ 351,082.03	1.52
Amount paid as wages	1,877,164.35	2,040,750.85	+ 163,586.50	8.71
Av. capital to each person employed	10,924.82	10,138.14	- 786.68	7.20
Av. product to each person employed	6,254.24	5,677.48	- 576.76	9.22

BRICK—32 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1900				1901			
	Male.	Fe-male.	TOTAL.		Male.	Fe-male.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	54	.....	54	6.34	41	.....	41	4.69
\$5.00 but under \$6.00	16	1	17	2.00	16	.....	16	1.82
6.00 but under 7.00	48	.....	48	5.64	49	.....	49	5.61
7.00 but under 8.00	57	.....	57	6.70	51	.....	51	5.84
8.00 but under 9.00	142	.....	142	16.68	174	.....	174	19.91
9.00 but under 10.00	427	.....	427	50.18	379	.....	379	43.36
10.00 but under 12.00	77	.....	77	9.05	112	.....	112	12.81
12.00 but under 15.00	23	.....	23	2.70	41	.....	41	4.69
15.00 but under 20.00	5	.....	5	.59	9	.....	9	1.03
20.00 and over	1	.....	1	.12	2	.....	2	.23
Totals	850	1	851	100.00	874	.....	874	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGE OF—			
			Employment.		Unemployment.	
	1900.	1901.	1900	1901.	1900.	1901.
January	118	121	14.50	14.44	85.50	85.56
February	129	121	15.85	14.44	84.15	85.56
March	149	147	18.20	16.35	81.70	83.65
April	302	284	37.10	33.89	62.90	66.11
May	707	690	86.86	82.34	13.14	17.66
June	814	796	100.00	94.00	.....	5.01
July	849	848	99.29	100.00	.61	.....
August	793	817	97.42	97.49	2.58	2.51
September	690	733	84.77	87.47	15.23	12.53
October	461	509	56.63	60.74	43.37	39.26
November	268	302	32.92	36.04	67.08	63.96
December	154	162	18.92	19.33	81.08	80.67

3. Other Presentations.

CLASSIFICATION.	1900.	1901.	INCREASE OR DECREASE IN 1901.	
			Amount.	Pct.
Smallest No. of persons employed	118	121	+	3 2.54
Greatest No. of persons employed	814	838	+	24 2.96
Average No. of persons employed	450	459	+	9 2.00
Average yearly earnings	\$338.95	\$359.96	+	\$20.41 6.02
Average time in operation, days ..	151.31	147.44	—	3.87 2.56
No. of private firms	23	23	.....	.....
No. of male partners	34	30	—	4 11.76
No. of female partners	2	.....	—	2 100.00
Total No. of partners	36	30	—	6 16.67
No. of corporations	9	9	.....	.....
No. of male stockholders	47	52	+	5 10.64
No. of female stockholders	13	16	+	3 23.08
Total No. of stockholders	60	68	+	8 13.33
Total No. of partners and stockholders	96	98	+	2 2.08
Amount of capital invested	\$531,795.54	\$576,017.07	+	\$44,221.53 8.32
Value of goods made or work done ..	444,690.50	496,496.14	+	18,194.26 4.09
Amount paid as wages	152,527.81	164,946.74	+	12,418.93 8.15
Av. capital to each person employed ..	1,181.77	1,254.94	+	73.17 6.19
Av. product to each person employed ..	988.20	929.19	—	59.01 5.97

MANUFACTURERS' RETURNS FOR 1900-1901.

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BROOMS AND BRUSHES—17 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1900				1901			
	Male.	Fe-male.	TOTAL.		Male.	Fe-male.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	71	5	76	28.57	56	.....	56	19.38
\$5.00 but under \$6.00	20	.....	20	6.99	25	.....	25	8.66
6.00 but under 7.00	19	.....	19	6.64	23	.....	23	7.96
7.00 but under 8.00	30	.....	30	10.49	39	.....	39	13.49
8.00 but under 9.00	40	.....	40	13.99	37	.....	37	12.80
9.00 but under 10.00	56	.....	56	19.58	61	.....	61	21.11
10.00 but under 12.00	29	.....	29	10.15	24	.....	24	8.30
12.00 but under 15.00	12	.....	12	4.19	19	.....	19	6.57
15.00 but under 20.00	3	.....	3	1.06	3	.....	3	1.04
20.00 and over	1	.....	1	.35	2	.....	2	.69
Total	281	5	286	100.00	289	.....	289	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGE OF—			
			Employment.		Unemployment.	
	1900.	1901.	1900.	1901.	1900.	1901.
January	183	210	76.57	82.03	23.43	17.97
February	186	206	77.82	80.47	22.18	19.53
March	205	230	85.77	89.84	14.23	10.16
April	204	232	85.36	90.63	14.64	9.37
May	223	255	93.31	100.00	6.69	.....
June	227	255	94.93	99.61	5.02	.39
July	257	255	99.16	99.61	.84	.39
August	259	248	100.00	96.88	.....	3.12
September	226	235	94.56	91.80	5.44	8.20
October	193	211	80.75	82.42	19.25	17.58
November	194	218	81.17	85.16	18.83	14.84
December	186	205	77.82	80.08	22.18	19.92

3. Other Presentations.

CLASSIFICATION.	1900.	1901.	INCREASE OR DECREASE IN 1901.	
			Amount.	Pct.
Smallest No. of persons employed	183	205	+	22 12.02
Greatest No. of persons employed	239	256	+	17 7.11
Average No. of persons employed	209	230	+	21 10.05
Average yearly earnings	\$270 65	\$281 77	+	\$11.12 4.10
Average time in operation, days ..	260	289	+	29 11.15
No. of private firms	12	12	.....	.....
No. of male partners	18	17	—	1 5.55
No. of female partners .....	.....	.....	.....	.....
Total No. of partners	18	17	—	1 5.55
No. of corporations	5	5	.....	.....
No. of male stockholders	26	28	+	2 7.69
No. of female stockholders	6	5	—	1 16.66
Total No. of stockholders	32	33	+	1 3.13
Total No. of partners and stockholders	50	50	.....	.....
Amount of capital invested	\$161,457 86	\$176,074 70	+	\$14,576 84 9.03
Value of goods made or work done	234,141 25	272,295 89	+	38,154 64 16.30
Amount paid as wages	56,566 50	64,807 57	+	8,241 07 14.57
Av. capital to each person employed	772 52	765 37	—	7 15
Av. product to each person employed	1,120 29	1,183 90	+	63 61 5.68

CEMENT—12 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1900				1901			
	Male.	Fe-male.	TOTAL.		Male.	Fe-male.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	30	34	64	9.73	20	41	61	9.01
\$5.00 but under \$6.00	8	1	9	1.37	7	4	11	1.62
6.00 but under 7.00	20	.....	20	3.04	21	.....	21	3.10
7.00 but under 8.00	162	1	163	24.77	33	1	34	5.02
8.00 but under 9.00	46	.....	46	6.99	181	.....	181	26.74
9.00 but under 10.00	166	.....	166	25.23	265	.....	265	39.14
10.00 but under 12.00	162	.....	162	24.62	65	.....	65	9.60
12.00 but under 15.00	18	.....	18	2.73	28	.....	28	4.14
15.00 but under 20.00	8	.....	8	1.22	9	.....	9	1.33
20.00 and over	2	.....	2	.30	2	.....	2	.50
Total	622	36	658	100.00	631	46	677	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGE OF—			
			Employment.		Unemployment.	
	1900.	1901.	1900.	1901.	1900.	1901.
January	288	333	47.45	56.15	52.55	43.85
February	299	286	49.26	48.06	50.74	51.94
March	354	352	58.32	59.36	41.68	40.64
April	507	501	83.53	84.49	16.47	15.51
May	526	584	86.66	93.48	13.34	1.52
June	607	560	100.00	94.44	.....	5.56
July	577	568	95.06	95.78	4.94	4.22
August	548	564	90.28	93.42	9.72	6.58
September	537	559	88.47	94.27	11.53	5.73
October	544	593	89.62	100.00	10.38	.....
November	530	554	87.31	93.42	12.69	6.58
December	308	413	50.74	69.65	49.26	30.35

3. Other Presentations.

CLASSIFICATION.	1900.	1901.	INCREASE OR DECREASE IN 1901.	
			Amount.	Pr. ct.
Smallest No. of persons employed	288	285	—	3
Greatest No. of persons employed	607	593	—	14
Average No. of persons employed	469	488	+	19
Average yearly earnings	\$594 71	\$382 35	—	\$12 36
Average time in operation, days ..	252	262	.....	.....
No. of private firms	3	3	.....	.....
No. of male partners	4	4	.....	.....
No. of female partners	1	1	.....	.....
Total No. of partners	5	5	.....	.....
No. of corporations	9	9	.....	.....
No. of male stockholders	215	212	—	3
No. of female stockholders	60	60	.....	.....
Total No. of stockholders	275	272	—	3
Total No. of partners and stockholders	290	277	—	3
Amount of capital invested	\$1,188,379 10	\$1,349,551 94	+	\$161,172 84
Value of goods made or work done ..	1,254,977 68	1,542,812 41	+	187,834 73
Amount paid as wages	185,157 15	186,584 53	+	1,427 38
Av. capital to each person employed ..	2,533 86	2,765 48	+	231 62
Av. product to each person employed ..	2,849 08	3,161 50	+	272 42

MANUFACTURERS' RETURNS FOR 1900-1901.

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CIGARS—51 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1900				1901			
	Male.	Fe-Male.	TOTAL.		Male.	Fe-male.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	94	143	237	26.63	84	128	212	25.57
\$5.00 but under \$6.00	27	21	48	5.59	14	60	74	8.93
6.00 but under 7.00	37	11	48	5.59	21	16	37	4.46
7.00 but under 8.00	36	14	50	5.62	34	19	53	6.39
8.00 but under 9.00	81	21	102	11.46	66	16	82	9.89
9.00 but under 10.00	75	5	80	8.99	76	13	89	10.74
10.00 but under 12.00	111	6	117	13.15	111	2	113	13.63
12.00 but under 15.00	112	2	114	12.81	99	6	105	12.67
15.00 but under 20.00	61	3	64	7.19	51	10	61	7.36
20.00 and over	30	.....	30	3.37	3	.....	3	.36
Total	664	226	890	100.00	569	270	839	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGE OF—			
			Employment.		Unemployment.	
	1900.	1901.	1900.	1901.	1900.	1901.
January	779	773	93.07	95.31	6.93	4.69
February	756	758	90.32	93.46	9.68	6.54
March	794	763	94.86	94.08	5.14	5.92
April	799	765	95.46	94.33	4.54	6.67
May	822	768	98.21	94.70	1.79	5.30
June	791	790	94.50	97.41	5.50	2.59
July	780	808	93.19	99.63	6.81	.37
August	819	791	97.85	97.53	2.15	2.47
September	815	797	97.37	98.27	2.63	1.73
October	811	801	96.89	98.77	3.11	1.23
November	837	800	100.00	98.64	.....	1.36
December	786	811	93.91	100.00	6.09	.....

3. Other Presentations.

CLASSIFICATION.	1900.	1901.	INCREASE OR DECREASE IN 1901.	
			Amount.	Pr. ct.
Smallest No. of persons employed	756	758	+	2
Greatest No. of persons employed	837	811	-	26
Average No. of persons employed	799	785	-	14
Average yearly earnings	\$370 77	\$391 12	+	\$20 35
Average time in operation, days ..	285 80	285 18	-	.62
No. of private firms	48	48	.....	.....
No. of male partners	58	56	-	2
No. of female partners .....	.....	.....	.....	.....
Total No. of partners	58	56	-	2
No. of corporations	3	3	.....	.....
No. of male stockholders	13	11	-	2
No. of female stockholders .....	.....	2	+	2
Total No. of stockholders	13	13	.....	.....
Total No. of partners and stockholders	71	69	-	2
Amount of capital invested	\$458,748 78	\$567,811 18	+	\$109,062 40
Value of goods made or work done	1,071,888 37	1,067,065 18	-	4,803 19
Amount paid as wages	296,242 05	307,026 18	+	10,784 13
Av. capital to each person employed	574 15	723 32	+	149 18
Av. product to each person employed	1,341 54	1,359 34	+	17 80

CLOTHING—29 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1900				1901			
	Male.	Fe- male.	TOTAL.		Male	Fe- male.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	56	1,118	1,174	57.15	46	1,183	1,229	35.07
\$5.00 but under \$6.00	14	862	866	27.40	18	1,047	1,065	30.39
6.00 but under 7.00	22	331	353	11.17	24	372	396	11.30
7.00 but under 8.00	38	161	199	6.30	26	187	213	6.08
8.00 but under 9.00	42	79	121	3.83	45	73	118	3.37
9.00 but under 10.00	58	51	109	3.45	72	62	134	3.83
10.00 but under 12.00	69	27	96	3.04	63	29	92	2.63
12.00 but under 15.00	79	9	88	2.78	75	18	93	2.66
15.00 but under 20.00	71	.....	71	2.25	69	1	70	2.00
20.00 and over	81	2	83	2.63	93	1	94	2.63
Total	530	2,630	3,160	100.00	531	2,973	3,504	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1900.	1901.	1900.	1901.	1900.	1901.
January	2,683	2,980	90.12	88.88	9.88	11.12
February	2,761	3,080	92.74	91.86	7.26	8.14
March	2,851	3,123	95.77	93.14	4.23	6.86
April	2,873	3,095	96.51	92.34	3.49	7.66
May	2,877	3,111	96.64	92.78	3.36	7.22
June	2,865	3,154	96.24	94.07	3.76	5.93
July	2,720	3,244	91.37	96.75	8.63	3.25
August	2,857	3,267	95.97	97.44	4.03	2.56
September	2,953	3,353	99.19	100.00	.81	.....
October	2,977	3,346	100.00	99.79	.....	.21
November	2,862	3,274	96.14	97.64	3.86	2.36
December	2,779	3,083	93.35	91.95	6.65	8.05

3. Other Presentations.

CLASSIFICATION.	1900.	1901.	INCREASE OR DECREASE IN 1901.	
			Amount.	Prct.
Smallest No. of persons employed	2,683	2,980	+	297
Greatest No. of persons employed	2,977	3,353	+	376
Average No. of persons employed	2,838	3,176	+	338
Average yearly earnings	\$352.45	\$316.43	—	\$36.02
Average time in operation, days ..	284.69	280.41	—	4.28
No. of private firms	10	10	.....	.....
No. of male partners	19	19	.....	.....
No. of female partners	2	1	—	1
Total No. of partners	21	20	—	1
No. of corporations	19	19	.....	.....
No. of male stockholders	133	126	—	7
No. of female stockholders	67	68	+	1
Total No. of stockholders	200	194	—	6
Total No. of partners and stockholders	221	214	—	7
Amount of capital invested	\$2,447,870.86	\$2,467,475.53	+	\$19,604.67
Value of goods made or work done ..	5,569,254.74	5,814,483.23	+	245,228.49
Amount paid as wages	1,000,250.28	1,004,996.93	+	4,736.65
Av. capital to each person employed ..	862.53	776.91	—	85.62
Av. product to each person employed ..	1,962.59	1,830.76	—	131.83

MANUFACTURERS' RETURNS FOR 1900-1901.

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COOPERAGE-17 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1900				1901			
	Male	Fe-male.	TOTAL.		Male	Fe-male.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	45	.....	45	8.47	38	.....	38	8.02
\$5.00 but under \$6.00	15	.....	15	2.82	22	.....	22	4.64
6.00 but under 7.00	31	.....	31	5.84	31	.....	31	6.54
7.00 but under 8.00	50	.....	50	9.42	49	.....	49	10.34
8.00 but under 9.00	50	.....	50	9.42	43	.....	43	9.07
9.00 but under 10.00	124	.....	124	23.35	119	.....	119	25.11
10.00 but under 12.00	40	.....	40	7.53	44	.....	44	9.28
12.00 but under 15.00	95	.....	95	17.89	61	.....	61	12.87
15.00 but under 20.00	80	.....	80	15.07	66	.....	66	13.92
20.00 and over	1	.....	1	.19	1	.....	1	.21
Total	531	.....	531	100.00	474	.....	474	100.00

2. Number of Persons Employed, Range of Employment-By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
			1900.	1901.	1900.	1901.
January	428	406	91.45	94.86	8.55	5.14
February	422	419	90.17	97.90	9.83	2.10
March	450	417	96.15	97.43	3.85	2.57
April	446	418	95.30	97.66	4.70	2.34
May	448	418	96.73	97.66	4.27	2.34
June	446	403	96.09	94.16	4.91	5.84
July	433	400	92.52	93.46	7.48	6.54
August	414	339	88.46	90.89	11.54	9.11
September	425	386	90.81	90.19	9.19	9.81
October	468	421	100.00	98.36	.....	1.64
November	447	428	95.51	100.00	4.49	.....
December	393	397	83.97	92.76	16.03	7.24

3. Other Presentations.

CLASSIFICATION.	1900.	1901.	INCREASE OR DECREASE IN 1901.	
			Amount.	Pct.
Smallest No. of persons employed	393	386	—	1.78
Greatest No. of persons employed	468	428	40	8.55
Average No. of persons employed	435	409	26	5.98
Average yearly earnings	\$428 10	\$433 52	+	\$5 42 1.27
Average time in operation, days ..	249.24	237.35	—	11.89 4.77
No. of private firms	13	13	.....	.....
No. of male partners	15	15	.....	.....
No. of female partners .....	.....	.....	.....	.....
Total No. of partners	15	15	.....	.....
No. of corporations	4	4	.....	.....
No. of male stockholders	12	13	+	1 8.33
No. of female stockholders	1	6	+	5 500.00
Total No. of stockholders	13	19	+	6 46.15
Total No. of partners and stockholders	28	34	+	6 21.43
Amount of capital invested	\$486 679 801	\$614 256 751	+	\$127 716 95 26.24
Value of goods made or work done	718 798 431	729 421 391	+	10 642 96 1.48
Amount paid as wages	186 225 081	177 307 651	—	8 917 43 4.79
Av. capital to each person employed	1 118 71	1 502 091	+	383 381 34.27
Av. product to each person employed	1 652 391	1 783 451	+	131 061 7.93

COTTON AND LINEN—6 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1900				1901			
	Male.	Fe-male.	TOTAL.		Male	Fe-male.	TOTAL.	
			No.	Pr ct.			No.	Pr. ct.
Under \$5.00	80	170	250	49.80	60	148	208	48.15
\$5.00 but under \$6.00	34	56	89	17.73	19	30	49	11.34
6.00 but under 7.00	24	37	61	12.15	35	57	92	21.30
7.00 but under 8.00	25	13	38	7.57	28	4	32	7.41
8.00 but under 9.00	22	2	24	4.78	16	.....	16	3.70
9.00 but under 10.00	7	1	8	1.59	17	.....	17	3.93
10.00 but under 12.00	20	.....	20	3.98	9	.....	9	2.08
12.00 but under 15.00	7	.....	7	1.40	5	.....	5	1.16
15.00 but under 20.00	6	.....	6	1.00	4	.....	4	.93
20.00 and over .....	.....	.....	.....	.....	.....	.....	.....	.....
Total	224	278	502	100.00	193	239	432	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1900.	1901.	1900.	1901.	1900.	1901.
January	440	410	94.62	95.79	5.38	4.21
February	449	409	96.56	93.22	3.44	6.78
March	404	416	86.88	97.20	13.12	2.80
April	465	428	100.00	100.00	.....	.....
May	461	427	99.14	99.77	.86	.23
June	443	300	95.27	70.69	4.73	29.31
July	464	291	99.78	68.00	.22	32.00
August	430	275	92.47	64.25	7.53	35.75
September	442	165	96.06	38.55	4.95	61.45
October	434	322	93.33	75.23	6.67	24.77
November	443	310	95.27	72.43	4.73	27.57
December	440	310	94.62	72.43	5.38	27.57

3. Other Presentations.

CLASSIFICATION.	1900.	1901.	INCREASE OR DECREASE IN 1901.	
			Amount.	Prct.
Smallest No. of persons employed	404	165	—	239
Greatest No. of persons employed	465	428	—	37
Average No. of persons employed	443	339	—	104
Average yearly earnings	\$336 28	\$338 40	+	\$2 12
Average time in operation, days ..	290.50	250.17	—	40.33
No. of private firms	2	2	.....	.....
No. of male partners	3	4	+	1
No. of female partners .....	.....	.....	.....	.....
Total No. of partners	3	4	+	1
No. of corporations	4	4	.....	.....
No. of male stockholders	132	131	—	1
No. of female stockholders	57	60	+	3
Total No. of stockholders	189	191	+	2
Total No. of partners and stockholders	192	195	+	3
Amount of capital invested	\$752,900 52	\$762,347 65	+	\$9,447 13
Value of goods made or work done ..	682,495 77	466,896 53	—	215,599 24
Amount paid as wages	148,969 95	114,718 55	—	34,251 40
Av. capital to each person employed ..	1,699 55	2,248 81	+	549 26
Av. product to each person employed ..	1,540 62	1,377 28	—	163 34

CRACKERS AND CONFECTIONERY—16 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1900				1901			
	Male	Fe-male.	TOTAL.		Male.	Fe-male.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	257	1,110	1,367	73.02	271	1,108	1,379	69.15
\$5.00 but under \$6.00	40	46	86	4.59	72	66	138	6.92
6.00 but under 7.00	45	11	56	2.99	53	20	73	3.66
7.00 but under 8.00	43	3	46	2.46	61	10	71	3.56
8.00 but under 9.00	45	4	50	2.68	63	2	65	3.26
9.00 but under 10.00	50	1	51	2.73	56	1	57	2.86
10.00 but under 12.00	88	.....	88	4.71	90	.....	90	4.52
12.00 but under 15.00	65	.....	65	3.46	66	.....	66	3.31
15.00 but under 20.00	48	.....	48	2.56	41	.....	41	2.06
20.00 and over	15	.....	15	.80	14	.....	14	.70
Total	697	1,175	1,872	100.00	787	1,207	1,994	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1900.	1901.	1900.	1901.	1900.	1901.
January	1,353	1,544	72.92	78.51	27.08	21.49
February	1,356	1,534	73.14	78.11	26.86	21.89
March	1,331	1,612	71.79	82.08	28.21	17.92
April	1,473	1,619	79.44	82.43	20.56	17.57
May	1,549	1,710	83.55	87.07	16.45	12.93
June	1,598	1,768	86.19	90.02	13.81	9.98
July	1,621	1,747	87.43	89.95	12.57	10.05
August	1,645	1,781	88.73	90.68	11.27	9.32
September	1,652	1,847	89.10	94.04	10.90	5.96
October	1,825	1,964	98.44	100.00	1.56	.....
November	1,854	1,935	100.00	98.52	.....	1.48
December	1,770	1,858	95.47	94.60	4.53	5.40

3. Other Presentations.

CLASSIFICATION.	1900.	1901.	INCREASE OR DECREASE IN 1901.	
			Amount.	Prct.
Smallest No. of persons employed..	1,331	1,534	+	203
Greatest No. of persons employed..	1,854	1,964	+	110
Average No. of persons employed..	1,586	1,743	+	157
Average yearly earnings	\$220 61	\$226 67	+	\$6 06
Average time in operation, days....	300.63	299.44	-	1.19
No. of private firms	4	4	.....	.....
No. of male partners	3	3	.....	.....
No. of female partners .....	.....	.....	.....	.....
Total No. of partners	3	3	.....	.....
No. of corporations	12	12	.....	.....
No. of male stockholders	44	46	+	2
No. of female stockholders	6	6	.....	.....
Total No. of stockholders	50	52	+	2
Total No. of partners and stockholders	53	55	+	2
Amount of capital invested.....	\$1,410,485 77	\$1,494,423 35	+	\$83,937 58
Value of goods made or work done..	2,914,118 43	3,644,025 13	+	729,906 70
Amount paid as wages	349,896 76	395,085 85	+	45,189 09
Av. capital to each person employed	889 34	858 53	-	30 81
Av. product to each person employed	1,837 40	2,090 66	+	253 45

1. Classified Weekly Earnings.

ELECTRIC AND GAS APPARATUS—24 ESTABLISHMENTS.

CLASSIFIED WEEKLY EARNINGS.	1900				1901			
	Male	Fe- male.	TOTAL.		Male	Fe- male.	TOTAL.	
			No.	Pr. ct			No.	Pr. ct.
Under \$5.00	261	115	376	21.82	253	82	335	18.62
\$5.00 but under \$8.00	87	27	114	6.62	83	34	117	6.50
6.00 but under 7.00	62	14	76	4.41	77	13	90	5.00
7.00 but under 8.00	111	1	112	6.50	79	2	81	4.50
8.00 but under 9.00	124	1	125	7.26	80	.....	80	4.46
9.00 but under 10.00	231	2	233	13.52	372	2	374	20.79
10.00 but under 12.00	201	2	203	11.78	214	.....	214	11.90
12.00 but under 15.00	257	1	258	14.97	246	.....	246	13.68
15.00 but under 20.00	165	.....	165	9.58	208	.....	208	11.56
20.00 and over	61	.....	61	3.54	54	.....	54	3.00
Total	1,560	163	1,723	100.00	1,666	133	1,799	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
			1900.	1901.	1900.	1901.
January	1,509	1,339	98.43	77.44	1.57	22.56
February	1,516	1,502	98.81	86.87	1.19	13.13
March	1,533	1,591	100.00	92.02	.....	7.98
April	1,531	1,629	99.87	94.22	1.13	5.78
May	1,515	1,642	98.83	94.97	1.17	5.03
June	1,392	1,584	90.80	91.61	9.20	8.39
July	1,326	1,628	86.43	94.16	13.57	5.84
August	1,266	1,651	82.58	95.49	17.42	4.51
September	1,299	1,676	84.74	96.88	15.26	3.12
October	1,335	1,625	87.08	93.98	12.92	6.02
November	1,365	1,779	89.04	100.00	10.96	.....
December	1,378	1,571	89.89	90.86	10.11	9.14
December	1,378	1,571	89.89	90.86	10.11	9.14

3. Other Presentations.

CLASSIFICATION.	1900.	1901.	INCREASE OR DECREASE IN 1901.	
			Amount.	Pct.
Smallest No. of persons employed..	1,266	1,339	+	73
Greatest No. of persons employed..	1,533	1,729	+	196
Average No. of persons employed..	1,414	1,597	+	183
Average yearly earnings	\$447 10	\$417 51	—	\$29 59
Average time in operation, days....	297.17	299.21	+	2.04
No. of private firms	9	9	.....	.....
No. of male partners	19	19	.....	.....
No. of female partners .....	.....	.....	.....	.....
Total No. of partners	19	19	.....	.....
No. of corporations	15	15	.....	.....
No. of male stockholders	142	142	.....	.....
No. of female stockholders	14	36	+	22
Total No. of stockholders	156	178	+	22
Total No. of partners and stockholders	175	197	+	22
Amount of capital invested.....	\$3 705,590 731	\$3,807,660 23	+	\$102,169 501
Value of goods made or work done..	3,222,283 591	3,922,029 47	+	699,745 881
Amount paid as wages.....	632,905 561	668,764 52	+	34,558 961
Av. capital to each person employed	2,690 601	2,384 26	—	296 341
Av. product to each person employed	2,278 841	2,455 97	+	177 031

FLOUR-71 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1900				1901			
	Male	Fe- male.	TOTAL.		Male	Fe- male.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	14	1	15	1.67	15	1	16	1.74
\$5.00 but under \$6.00	9	.....	9	1.00	5	.....	5	.54
6.00 but under 7.00	49	1	50	5.56	65	2	67	7.27
7.00 but under 8.00	119	.....	119	13.22	106	.....	106	11.49
8.00 but under 9.00	121	.....	121	13.44	120	.....	120	13.02
9.00 but under 10.00	187	.....	187	20.78	214	.....	214	23.21
10.00 but under 12.00	213	.....	218	24.22	202	.....	202	21.91
12.00 but under 15.00	101	.....	101	11.22	106	.....	106	11.49
15.00 but under 20.00	67	.....	67	7.44	70	.....	70	7.59
20.00 and over	13	.....	13	1.45	16	.....	16	1.74
Total	898	2	900	100.00	919	3	922	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1900.	1901.	1900.	1901.	1900.	1901.
January	702	800	81.16	94.01	18.84	5.99
February	690	791	79.77	92.95	20.23	7.05
March	678	781	78.38	91.77	21.62	8.23
April	676	769	78.15	90.36	21.85	9.64
May	733	823	84.74	96.71	15.26	3.29
June	812	814	93.87	95.65	6.13	4.35
July	817	802	94.46	94.24	5.54	5.76
August	841	813	97.23	95.53	2.77	4.47
September	845	824	97.69	96.83	2.31	3.17
October	854	839	98.73	98.59	1.27	1.41
November	865	851	100.00	100.00	.....	.....
December	839	827	96.99	97.18	3.01	2.82

3. Other Presentations.

CLASSIFICATION.	1900.	1901.	INCREASE OR DECREASE IN 1901.	
			Amount.	Pct.
Smallest No. of persons employed..	676	769	7	1.04
Greatest No. of persons employed..	865	851	14	1.62
Average No. of persons employed..	779	811	32	4.11
Average yearly earnings	\$502.02	\$491.74	\$10.28	2.05
Average time in operation, days....	260.86	260.54	.32	.12
No. of private firms	45	46	1	2.22
No. of male partners	66	70	4	6.06
No. of female partners	3	4	1	33.33
Total No. of partners	69	74	5	7.25
No. of corporations	26	25	1	3.85
No. of male stockholders	151	148	3	1.99
No. of female stockholders	13	33	20	153.85
Total No. of stockholders	164	181	17	10.37
Total No. of partners and stockholders	233	255	22	9.44
Amount of capital invested.....	\$6,051,249.79	\$6,249,277.45	\$198,027.66	4.93
Value of goods made or work done..	13,979,590.75	14,235,613.38	256,022.63	1.83
Amount paid as wages	391,074.70	398,804.36	7,729.66	1.97
Av. capital to each person employed	7,767.97	7,828.95	60.98	.79
Av. product to each person employed	17,945.56	17,553.16	392.40	2.19

FOOD PREPARATIONS—17 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1900				1901			
	Male.	Fe-male.	TOTAL.		Male	Fe-male	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	256	592	848	37.11	213	479	692	33.54
\$5.00 but under \$6.00	81	268	289	12.65	61	75	136	6.59
6.00 but under 7.00	104	45	149	6.52	90	83	173	8.39
7.00 but under 8.00	135	5	140	6.13	231	34	265	12.84
8.00 but under 9.00	204	13	217	9.50	87	8	95	4.61
9.00 but under 10.00	334	23	357	15.62	401	3	404	19.58
10.00 but under 12.00	196	1	197	8.62	189	21	210	10.18
12.00 but under 15.00	41	.....	41	1.79	36	1	37	1.79
15.00 but under 20.00	18	.....	18	.79	23	.....	23	1.12
20.00 and over	29	.....	29	1.27	28	.....	28	1.36
Total	1,398	887	2,285	100.00	1,359	704	2,063	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
			1900.	1901.	1900.	1901.
January	50	41	2.59	2.39	97.41	97.61
February	50	34	2.59	1.98	97.41	98.02
March	74	51	3.83	2.97	93.17	97.03
April	114	89	5.90	5.18	91.10	94.82
May	149	119	7.71	6.93	92.29	93.07
June	935	953	48.57	55.97	51.63	44.53
July	1,933	1,718	100.00	100.00	.....	.....
August	1,851	1,054	95.76	61.35	4.24	38.65
September	1,178	1,023	60.94	59.55	39.06	40.45
October	497	569	25.71	29.63	74.29	70.37
November	246	161	12.73	90.63	87.27	9.37
December	62	48	3.21	2.79	96.79	97.21

3. Other Presentations.

CLASSIFICATION.	1900.	1901.	INCREASE OR DECREASE IN 1901.		
			Amount.	Prcnt.	
Smallest No. of persons employed..	50	34	—	16	32.00
Greatest No. of persons employed..	1,933	1,718	—	215	11.12
Average No. of persons employed..	595	483	—	112	18.82
Average yearly earnings	\$239.39	\$249.88	+	\$10.49	4.39
Average time in operation, days....	109	97	—	12	11.01
No. of private firms	3	4	+	1	33.33
No. of male partners	4	23	+	19	475.00
No. of female partners .....	.....	1	+	1	.....
Total No. of partners	4	24	+	20	500.00
Total No. of corporations	14	13	—	1	7.14
No. of male stockholders	338	238	—	100	29.59
No. of female stockholders	18	19	+	1	5.56
Total No. of stockholders	356	257	—	99	27.81
Total No. of partners and stockholders	360	281	—	79	21.94
Amount of capital invested	\$776,009.92	\$847,942.46	+	\$71,933.24	9.27
Value of goods made or work done..	1,306,120.74	1,170,745.12	—	235,375.62	17.93
Amount paid as wages	142,439.74	120,693.94	—	21,745.40	15.28
Av. capital to each person employed	1,304.22	1,755.57	+	451.35	34.61
Av. product to each person employed	2,296.00	2,341.00	+	45.00	1.96

MANUFACTURERS' RETURNS FOR 1900-1901.

993

1. Classified Weekly Earnings. FURNITURE—74 ESTABLISHMENTS.

CLASSIFIED WEEKLY EARNINGS.	1900				1901			
	Male	Fe-male.	TOTAL.		Male.	Fe-male.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	899	261	1,160	14.18	899	332	1,231	14.67
\$5.00 but under \$6.00	354	101	455	5.56	363	70	433	5.16
6.00 but under 7.00	1,721	51	1,772	21.66	1,530	21	1,551	18.48
7.00 but under 8.00	1,548	2	1,550	18.95	1,594	9	1,603	19.10
8.00 but under 9.00	770	1	771	9.42	992	1	993	11.83
9.00 but under 10.00	951	1	952	11.64	842	1	843	10.05
10.00 but under 12.00	736	1	737	9.01	758	1	759	9.04
12.00 but under 15.00	549	1	550	6.72	697	1	698	8.32
15.00 but under 20.00	198	.....	198	2.42	226	.....	226	2.69
20.00 and over	36	.....	36	.44	55	.....	55	.66
Total	7,762	419	8,181	100.00	7,956	436	8,392	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
			1900.	1901.	1900.	1901
January	7,146	7,459	93.46	93.31	6.54	6.69
February	7,342	7,566	96.02	91.65	3.98	5.35
March	7,576	7,741	99.08	96.84	.92	3.16
April	7,621	7,708	99.67	96.42	.33	3.58
May	7,646	7,630	100.00	96.07	.....	3.93
June	7,424	7,552	97.10	94.47	2.90	5.53
July	6,888	7,385	90.09	92.38	9.91	7.62
August	7,344	7,787	96.06	97.41	3.95	2.59
September	7,495	7,906	98.03	98.89	1.97	1.11
October	7,619	7,994	99.65	100.00	.35	.....
November	7,580	7,994	99.14	100.00	.86	.....
December	7,209	7,676	91.28	96.02	5.72	3.98

3. Other Presentations.

CLASSIFICATION.	1900.	1901.	INCREASE OR DECREASE IN 1901.	
			Amount.	Prct.
Smallest No. of persons employed..	6,888	7,385	+	497
Greatest No. of persons employed..	7,646	7,994	+	348
Average No. of persons employed..	7,408	7,704	+	296
Average yearly earnings	\$355 61	\$370 77	+	\$15.16
Average time in operation, days....	283.93	292.54	+	8.61
No. of private firms	21	21	—	.....
No. of male partners	40	36	—	4
No. of female partners	6	1	—	5
Total No. of partners	46	37	—	9
No. of corporations	53	53	.....	.....
No. of male stockholders	600	681	+	81
No. of female stockholders	61	91	+	30
Total No. of stockholders	661	772	+	111
Total No. of partners and stockholders	707	809	+	102
Amount of capital invested	\$7,840,244 63	\$8,335,268 73	+	\$495 024 10
Value of goods made or work done..	9,009,185 85	9,246,101 43	+	236 915 58
Amount paid as wages	2,634,365 92	2,866,404 53	+	222,038 61
Av. capital to each person employed	1,068 35	1,081 94	+	23 59
Av. product to each person employed	1,216 14	1,200 17	—	15 97

FURS-12 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1900				1901			
	Male	Fe-male.	TOTAL.		Male.	Fe-male.	TOTAL.	
			No	Pr. ct.			No.	Pr. ct.
Under \$5.00	39	157	196	38.43	35	212	247	40.29
\$5.00 but under \$6.00	16	45	61	11.96	14	54	68	11.69
6.00 but under 7.00	23	26	49	9.61	34	60	94	15.34
7.00 but under 8.00	27	30	57	11.18	19	23	42	6.85
8.00 but under 9.00	16	21	37	7.26	11	18	29	4.73
9.00 but under 10.00	22	6	28	5.49	19	6	25	4.08
10.00 but under 12.00	19	5	24	4.71	23	8	31	5.06
12.00 but under 15.00	34	1	35	6.86	46	4	49	7.99
15.00 but under 20.00	17	.....	17	3.33	18	1	19	3.10
20.00 and over	6	.....	6	1.17	9	.....	9	1.47
Total	219	291	510	100.00	227	386	613	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO OF PERSONS EMPLOYED.		PERCENTAGES OF--			
			Employment.		Unemployment.	
	1900.	1901.	1900.	1901.	1900.	1901.
January	298	365	65.21	60.03	34.79	39.97
February	317	384	69.37	63.16	30.63	36.84
March	356	427	77.90	70.23	22.10	29.77
April	372	447	81.40	73.62	18.60	26.48
May	385	454	84.25	74.67	15.75	25.37
June	372	479	81.40	78.78	18.60	21.22
July	396	504	86.65	82.89	13.35	17.11
August	434	562	94.97	92.43	5.03	7.57
September	457	598	100.00	98.36	.....	1.64
October	456	608	99.78	100.00	.22	.....
November	455	496	99.56	81.58	.44	18.42
December	417	461	91.25	75.82	8.75	24.18

3. Other Presentations.

CLASSIFICATION.	1900.	1901.	INCREASE OR DECREASE IN 1901.		
			Amount	Pr ct.	
Smallest No. of persons employed..	298	365	+	67	22.43
Greatest No. of persons employed..	457	608	+	151	33.04
Average No. of persons employed..	393	482	+	89	22.65
Average yearly earnings	\$340 51	\$293 11	-	\$47 40	13.92
Average time in operation, days....	256 50	289 00	+	32 50	12.67
No. of private firms	9	9	.....	.....	.....
No. of male partners	14	14	.....	.....	.....
No. of female partners .....	.....	.....	.....	.....	.....
Total No. of partners	14	14	.....	.....	.....
No. of corporations	3	3	.....	.....	.....
No. of male stockholders	15	15	.....	.....	.....
No. of female stockholders	1	1	.....	.....	.....
Total No. of stockholders	16	16	.....	.....	.....
Total No. of partners and stockholders	30	30	.....	.....	.....
Amount of capital invested	\$310,978 96	\$374,978 98	+	\$64,000 02	20.58
Value of goods made or work done..	743,616 37	847,620 54	+	104,004 17	13.99
Amount paid as wages	133,821 91	141,279 12	+	7,457 21	5.57
Av. capital to each person employed	768 29	777 95	+	9 57	1.26
Av. product to each person employed	1,892 15	1,768 55	-	123 60	7.06

IRON-25 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1900				1901			
	Ma.le.	Fe-male.	TOTAL.		Male	Fe-male.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	240	6	246	5.74	190	7	197	4.67
\$5.00 but under \$6.00	110	.....	110	2.57	115	.....	115	2.73
6.00 but under 7.00	213	.....	213	4.97	150	.....	150	3.56
7.00 but under 8.00	425	.....	425	9.91	245	.....	245	5.81
8.00 but under 9.00	913	.....	913	21.30	353	.....	353	8.37
9.00 but under 10.00	427	.....	427	9.96	1,272	.....	1,272	30.17
10.00 but under 12.00	749	.....	749	17.47	616	.....	616	14.61
12.00 but under 15.00	542	.....	542	12.64	564	.....	564	13.28
15.00 but under 20.00	337	.....	337	7.86	493	.....	493	11.69
20.00 and over	325	.....	325	7.58	211	.....	211	5.01
Total	4,281	6	4,287	100.00	4,209	7	4,216	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1900.	1901.	1900.	1901.	1900.	1901.
January	4,044	3,552	100.00	88.96	.....	11.04
February	3,886	3,625	96.10	90.79	3.90	9.21
March	3,802	3,794	94.02	90.16	5.98	9.84
April	3,629	3,909	89.73	97.65	10.27	2.35
May	3,160	3,892	78.14	97.47	21.86	2.53
June	3,066	3,742	75.82	93.72	24.18	6.28
July	2,180	3,640	53.91	91.16	46.09	8.84
August	2,145	3,276	53.04	82.06	46.96	17.95
September	3,067	3,438	75.84	86.10	24.16	13.90
October	3,378	3,867	83.53	96.86	16.47	3.15
November	3,444	3,993	85.16	100.00	14.84	.....
December	3,633	3,784	89.83	94.77	10.17	5.23

3. Other Presentations.

CLASSIFICATION.	1900.	1901.	INCREASE OR DECREASE IN 1901.	
			Amount.	Pct.
Smallest No. of persons employed	2,145	3,276	+	1,131 52.73
Greatest No. of persons employed	4,044	3,993	-	51 1.23
Average No. of persons employed	3,286	3,709	+	423 12.87
Average yearly earnings	\$464 14	\$494 17	+	\$30 03 6.47
Average time in operation	274.36	294.24	+	19.88 7.25
No. of private firms	6	6	.....	.....
No. of male partners	9	9	.....	.....
No. of female partners .....	.....	.....	.....	.....
Total No. of partners	9	9	.....	.....
No. of corporations	19	19	.....	.....
No. of male stockholders	146	139	-	7 4.79
No. of female stockholders	15	22	+	7 46.67
Total No. of stockholders	161	161	.....	.....
Total No. of partners and stockholders	170	170	.....	.....
Amount of capital invested	\$4,406,889 73	\$6,707,241 57	+	\$2,300,351 84 54.47
Value of goods made or work done	8,630,831 48	10,283,592 30	+	1,652,760 82 19.15
Amount paid as wages	1,525,151 98	1,832,888 45	+	307,736 47 20.18
Av. capital to each person employed	1,341 11	1,808 77	+	467 26 34.84
Av. product to each person employed	2,626 55	2,772 61	+	146 06 5.56

KNIT GOODS—18 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1900				1901			
	Male.	Fe-male.	TOTAL.		Male	Fe-male.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	173	1,752	1,925	54.58	113	1,672	1,785	53.91
\$5.00 but under \$6.00	38	471	509	14.43	57	380	437	13.20
6.00 but under 7.00	51	343	394	11.17	70	285	355	10.72
7.00 but under 8.00	71	172	243	6.89	54	157	211	6.37
8.00 but under 9.00	74	78	152	4.31	35	83	118	3.57
9.00 but under 10.00	64	63	127	3.60	76	66	141	4.26
10.00 but under 12.00	46	42	88	2.50	52	41	93	2.81
12.00 but under 15.00	39	4	43	1.22	65	9	74	2.23
15.00 but under 20.00	26	3	29	.82	40	3	43	1.30
20.00 and over	17	.....	17	.48	54	.....	54	1.63
Total	599	2,928	3,527	100.00	616	2,695	3,311	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
			1900.	1901.	1900.	1901.
January	2,932	2,968	84.30	93.39	15.70	6.61
February	3,020	3,026	86.83	95.22	13.17	4.78
March	3,223	3,140	92.67	98.90	7.33	1.20
April	3,247	3,170	93.36	99.75	6.64	.25
May	3,287	3,126	94.51	98.36	5.49	1.64
June	3,354	3,175	96.44	99.91	3.56	.09
July	3,419	3,165	98.30	99.59	1.70	.41
August	3,478	3,157	100.00	99.34	.....	.66
September	3,793	3,178	97.56	100.00	2.44	.....
October	3,369	3,158	9 687	99.37	3.13	.63
November	3,127	3,128	89.91	98.43	10.09	1.57
December	2,990	3,094	85.97	97.36	14.03	2.64

3. Other Presentations.

CLASSIFICATION.	1900.	1901.	INCREASE OR DECREASE IN 1901.		
			Amount.	Pr ct.	
Smallest No. of persons employed..	2,932	2,968	+	36	1.23
Greatest No. of persons employed..	3,478	3,178	—	300	8.63
Average No. of persons employed..	3,237	3,124	—	113	3.49
Average yearly earnings	\$225.84	\$240.40	+	\$14.56	6.45
Average time in operation	288.61	288.44	—	.17	.06
No. of private firms	4	4	—		
No. of male partners	4	5	+	1	25.00
No. of female partners	1	1	—		
Total No. of partners	5	6	+	1	20.00
No. of corporations	14	14	—		
No. of male stockholders	79	93	+	14	17.72
No. of female stockholders	41	28	—	13	31.71
Total No. of stockholders	120	121	+	1	.83
Total No. of partners and stockholders	125	127	+	2	1.60
Amount of capital invested	\$2,919,489.48	\$2,094,706.19	—	\$194,783.27	5.62
Value of goods made or work done	3,750,731.99	3,612,680.69	—	138,051.30	3.71
Amount paid as wages	731,090.64	751,016.94	+	19,926.30	2.73
Av. capital to each person employed	685.66	670.52	—	15.14	2.21
Av. product to each person employed	1,158.71	1,156.20	—	2.51	.21

LEATHIER-18 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1900				1901			
	Male.	Fe. male.	TOTAL.		Male.	Fe. male.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	160	7	167	4.39	137	182	319	8.48
\$5.00 but under \$6.00	89	2	91	2.19	95	85	180	4.80
6.00 but under 7.00	216	2	218	5.73	134	4	138	3.63
7.00 but under 8.00	425	1	426	11.22	371	1	372	9.91
8.00 but under 9.00	1,037	.....	1,037	27.24	594	2	596	15.88
9.00 but under 10.00	782	4	786	20.64	1,059	.....	1,059	28.21
10.00 but under 12.00	564	.....	564	14.82	769	.....	769	18.89
12.00 but under 15.00	405	.....	405	10.63	269	.....	269	7.17
15.00 but under 20.00	106	.....	106	2.78	103	.....	103	2.74
20.00 and over	6	.....	6	.16	9	.....	9	.24
Total	3,790	16	3,806	100.00	3,480	274	3,754	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1900.	1901.	1900.	1901.	1900.	1901.
January	3,631	3,455	99.15	93.99	.85	6.01
February	3,662	3,461	100.00	94.15	.....	5.85
March	3,640	3,532	99.40	96.08	.60	3.92
April	3,461	3,525	94.24	95.87	5.76	4.13
May	3,372	3,607	92.08	98.12	7.92	1.88
June	3,403	3,577	92.93	97.31	7.07	2.69
July	3,385	3,574	92.44	97.23	7.56	2.77
August	3,400	3,595	92.85	97.80	7.15	2.20
September	3,349	3,558	91.45	96.79	8.55	3.21
October	3,407	3,618	93.04	98.42	6.96	1.58
November	3,486	3,676	95.19	100.00	4.81	.....
December	3,420	3,570	93.39	97.12	6.61	2.88

3. Other Presentations.

CLASSIFICATION.	1900.	1901.	INCREASE OR DECREASE IN 1901.		
			Amount.	Pct.	
Smallest No. of persons employed..	3,349	3,455	+	106	3.17
Greatest No. of persons employed..	3,662	3,676	+	14	.38
Average No. of persons employed..	3,467	3,562	+	95	2.74
Average yearly earnings	\$403 11	\$430 76	+	\$27 65	6.86
Average time in operation	305.33	304.06	-	1.27	.42
No. of private firms	6	6	.....	.....	.....
No. of male partners	10	10	.....	.....	.....
No. of female partners	1	1	.....	.....	.....
Total No. of partners	11	11	.....	.....	.....
No. of corporations	12	12	.....	.....	.....
No. of male stockholders	5,510	6,210	+	700	12.70
No. of female stockholders	1,533	1,886	+	353	23.03
Total No. of stockholders	7,043	8,096	+	1,053	14.95
Total No. of partners and stockholders	7,054	8,107	+	1,053	14.93
Amount of capital invested	\$9,389,691 12	\$9,051,276 35	-	\$338,414 77	3.60
Value of goods made or work done	13,155,027 59	13,769,956 82	+	614,929 24	4.67
Amount paid as wages	1,397,593 34	1,534,366 18	+	136,772 84	9.78
Av. capital to each person employed	2,708 30	2,541 07	-	167 23	6.18
Av. product to each person employed	3,794 35	3,865 79	+	71 44	1.88

LUMBER—98 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1900				1901			
	Male.	Fe-male.	TOTAL.		Male.	Fe-male.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	213	6	219	1.34	256	1	257	1.61
\$5.00 but under \$6.00	141	2	143	.87	160	2	162	1.02
6.00 but under 7.00	634	2	636	3.91	521	2	523	3.23
7.00 but under 8.00	960	.....	960	5.91	977	.....	977	6.13
8.00 but under 9.00	1,567	2	1,569	9.65	2,100	1	2,101	13.17
9.00 but under 10.00	5,822	.....	5,822	35.81	4,963	.....	4,963	31.12
10.00 but under 12.00	3,790	.....	3,790	23.31	4,124	.....	4,124	25.86
12.00 but under 15.00	1,922	1	1,923	11.83	1,749	.....	1,749	10.96
15.00 but under 20.00	788	.....	788	4.85	724	.....	724	4.54
\$20.00 and over	469	.....	469	2.52	369	.....	369	2.31
Total	15,246	13	15,259	100.00	15,943	6	15,949	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1900.	1901.	1900.	1901.	1900.	1901.
January	9,686	9,334	70.50	67.40	29.50	32.60
February	10,693	9,654	73.46	69.90	26.54	30.10
March	9,646	9,699	70.15	70.02	29.85	29.98
April	11,648	12,003	84.78	86.66	15.22	13.34
May	13,601	13,851	99.07	100.00	.93	.....
June	13,739	13,675	100.00	98.73	.....	1.27
July	13,421	13,154	97.69	94.82	2.31	5.18
August	13,668	12,581	99.48	90.81	.52	9.19
September	13,471	11,835	98.06	85.45	1.94	14.55
October	13,166	11,821	95.83	85.34	4.17	14.66
November	12,063	11,118	87.80	80.17	12.20	19.83
December	8,916	8,726	64.90	63.00	35.10	37.00

3. Other Presentations.

CLASSIFICATION.	1900.	1901.	INCREASE OR DECREASE IN 1901.	
			Amount.	Prct.
Smallest No. of persons employed..	8,916	8,726	190	2.13
Greatest No. of persons employed..	13,739	13,851	112	.82
Average No. of persons employed..	11,926	11,453	473	3.97
Average yearly earnings	\$467.76	\$464.79	\$2.97	.63
Average time in operation, days ..	233	233	.....	.....
No. of private firms	38	38	.....	.....
No. of male partners	69	63	6	6.78
No. of female partners	3	2	1	33.33
Total No. of partners	62	65	3	4.84
No. of corporations	60	60	.....	.....
No. of male stockholders	1,521	1,514	7	.46
No. of female stockholders	48	51	3	6.25
Total No. of stockholders	1,569	1,565	4	.25
Total No. of partners and stockholders	1,631	1,630	1	.06
Amount of capital invested	\$32,909,554.01	\$28,658,572.44	\$4,250,981.57	12.92
Value of goods made or work done ..	28,145,985.97	27,135,703.84	1,010,282.13	3.58
Amount paid as wages	5,578,456.07	5,323,282.82	255,173.25	4.57
Av. capital to each person employed ..	2,759.48	2,502.28	257.20	9.32
Av. product to each person employed ..	2,360.00	2,193.31	166.69	7.06

MANUFACTURERS' RETURNS FOR 1900-1901.

999

MACHINERY—107 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1900				1901			
	Male.	Fe-male.	TOTAL.		Male.	Fe-male.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	572	1	573	6.27	533	1	534	5.51
\$5.00 but under \$6.00	128	1	129	1.41	147	1	148	1.53
6.00 but under 7.00	412	2	414	4.53	370	1	371	3.83
7.00 but under 8.00	694	1	695	7.61	491	1	492	5.08
8.00 but under 9.00	1,188	2	1,188	13.00	1,177	1	1,178	12.16
9.00 but under 10.00	1,466	3	1,469	16.07	1,777	3	1,780	18.38
10.00 but under 12.00	1,089	3	1,102	12.06	1,219	3	1,222	12.51
12.00 but under 15.00	1,613	.....	1,613	17.65	1,701	2	1,703	17.58
15.00 but under 20.00	1,613	.....	1,613	17.65	1,864	.....	1,864	19.24
20.00 and over	343	.....	343	3.75	395	.....	395	4.08
Total	9,126	13	9,139	100.00	9,674	13	9,687	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1900.	1901.	1900.	101.	1900.	1901.
January	7,951	8,003	97.30	88.63	2.70	11.38
February	7,966	8,194	97.48	90.73	2.52	9.27
March	8,057	8,333	98.59	92.27	1.41	7.73
April	8,057	8,348	98.59	92.44	1.41	7.56
May	8,011	8,389	98.03	92.89	1.97	7.11
June	8,172	8,199	100.00	90.79	.....	9.21
July	8,113	8,488	99.28	93.99	.72	6.01
August	8,136	8,895	99.56	98.49	.44	1.51
September	8,118	8,918	99.34	98.75	.66	1.25
October	7,994	8,921	97.82	98.78	2.18	1.22
November	8,051	9,031	98.52	100.00	1.48	.....
December	8,106	8,926	99.19	98.84	.81	1.16

3. Other Presentations.

CLASSIFICATION.	1900.	1901.	INCREASE OR DECREASE IN 1901.	
			Amount.	Prct.
Smallest No. of persons employed..	7,951	8,003	+	52 .65
Greatest No. of persons employed..	8,172	9,031	+	859 10.51
Average No. of persons employed..	8,061	8,554	+	493 6.12
Average yearly earnings	\$515 39	\$560 99	+	\$45 60 8.85
Average time in operation, days....	297	299	+	2 .67
No. of private firms	54	51	—	3 5.56
No. of male partners	80	75	—	5 6.25
No. of female partners	5	6	+	1 20.00
Total No. of partners	85	81	—	4 4.71
No. of corporations	53	54	+	3 5.66
No. of male stockholders	416	499	+	83 19.95
No. of female stockholders	45	56	+	11 24.44
Total No. of stockholders	461	555	+	94 20.39
Total No. of partners and stockholders	546	636	+	90 16.48
Amount of capital invested.....	\$14,376,566 39	\$15,692,383 97	+	\$1,315,817 58 9.15
Value of goods made or work done	16,508,303 44	18,206,285 88	+	1,697,982 44 10.29
Amount paid as wages	4,154,533 26	4,798,701 68	+	644,168 42 15.51
Av. capital to each person employed	1,783 47	1,834 51	+	51.04 2.86
Av. product to each person employed	2,047 92	2,128 39	+	80.47 3.93

MALT-7 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1900				1901			
	Male.	Fe-male.	TOTAL.		Male.	Fe-male.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	4	.....	4	1.31	.....	.....	.....	.....
\$5.00 but under \$6.00	4	.....	4	1.31	.....	.....	.....	.....
6.00 but under 7.00	2	.....	2	.65	1	.....	1	.31
7.00 but under 8.00	4	.....	4	1.30	.....	.....	.....	.....
8.00 but under 9.00	10	.....	10	3.27	4	.....	4	1.25
9.00 but under 10.00	54	.....	54	17.65	6	.....	6	1.88
10.00 but under 12.00	32	.....	32	10.46	34	.....	34	10.66
12.00 but under 15.00	176	.....	176	57.52	86	.....	86	26.96
15.00 but under 20.00	12	.....	12	3.92	171	.....	171	53.61
20.00 and over	8	.....	8	2.61	16	.....	16	5.02
Total	306	.....	306	100.00	1	.....	1	.31
					319	.....	319	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1900.	1901.	1900.	1901.	1900.	1901.
January	304	313	100.00	99.37	.....	.63
February	304	302	100.00	96.87	.....	4.13
March	289	290	95.07	92.06	4.93	7.94
April	192	255	63.16	80.96	36.84	19.05
May	191	245	62.83	77.77	37.17	22.23
June	183	226	60.20	71.75	39.80	28.25
July	156	188	51.32	59.68	48.68	40.32
August	154	170	50.66	53.97	49.34	46.03
September	192	247	63.16	78.41	36.84	21.59
October	283	284	93.09	90.16	6.91	9.84
November	303	293	99.67	93.02	.33	6.96
December	303	315	99.67	100.00	.33	.....

3. Other Presentations.

CLASSIFICATION.	1900.	1901.	INCREASE OR DECREASE IN 1901.	
			Amount.	Pct.
Smallest No. of persons employed..	154	170	+	16
Greatest No. of persons employed..	304	315	+	11
Average No. of persons employed..	238	261	+	23
Average yearly earnings	\$557 97	\$549 18	—	\$8.79
Average time in operation, days....	318.00	311.14	—	6.86
No. of private firms	2	2	.....	.....
No. of male partners	3	3	.....	.....
No. of female partners .....	.....	.....	.....	.....
Total No. of partners	3	3	.....	.....
No. of corporations	5	5	.....	.....
No. of male stockholders	1,224	1,024	—	200
No. of female stockholders	205	205	.....	.....
Total No. of stockholders	1,429	1,229	—	200
Total No. of partners and stockholders	1,432	1,232	—	200
Amount of capital invested.....	\$2,623,513 35	\$2,900,850 74	+	\$277,337 39
Value of goods made or work done	2,913,696 66	3,146,856 33	+	233,159 67
Amount paid as wages	132,796 43	143,337 11	+	10,540 68
Av. capital to each person employed	11,023 16	11,114 37	+	91 21
Av. product to each person employed	12,242 42	12,056 92	—	185 50

PAINT-7 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1900				1901			
	Male.	Fe-male.	TOTAL.		Male.	Fe-male.	TOTAL.	
			No.	Per ct.			No.	Per ct.
Under \$5.00	4	1	5	5.10	2	.....	2	1.74
\$5.00 but under \$6.00	5	.....	5	5.10	3	.....	3	2.61
6.00 but under 7.00	1	.....	1	1.02	4	.....	4	3.48
7.00 but under 8.00	23	.....	23	23.47	12	.....	12	10.43
8.00 but under 9.00	7	.....	7	7.14	13	.....	13	11.30
9.00 but under 10.00	21	.....	21	21.43	20	.....	20	26.09
10.00 but under 12.00	19	.....	19	19.39	24	.....	24	20.87
12.00 but under 15.00	13	.....	13	13.27	19	.....	19	16.52
15.00 but under 20.00	4	.....	4	4.08	6	.....	6	5.22
20.00 and over .....	.....	.....	.....	.....	2	.....	2	1.74
Total	97	1	98	100.00	115	.....	115	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1900.	1901.	1900.	1901.	1900.	1901.
January	80	73	87.91	73.74	12.09	26.26
February	82	68	90.11	68.69	9.89	31.31
March	72	72	79.12	72.73	20.88	27.27
April	74	91	81.32	91.32	18.68	8.08
May	90	93	98.90	93.94	1.10	6.06
June	76	99	83.52	100.00	16.48	.....
July	68	85	74.73	85.86	25.27	14.14
August	66	84	72.53	84.85	27.47	15.15
September	66	88	72.53	88.89	27.47	11.11
October	67	86	73.63	86.87	26.37	13.13
November	91	88	100.00	88.89	.....	11.11
December	83	86	91.21	86.87	8.79	13.13

3. Other Presentations.

CLASSIFICATION.	1900.	1901.	INCREASE OR DECREASE IN 1901.	
			Amount.	Pr ct.
Smallest No. of persons employed..	66	68	+	2 3.03
Greatest No. of persons employed..	91	99	+	8 8.79
Average No. of persons employed..	76	84	+	8 10.53
Average yearly earnings	\$454 61	\$472 90	+	\$18 29 4.02
Average time in operation, days..	242.71	253.86	+	11.15 4.59
No. of private firms	4	4	.....	.....
No. of male partners	6	6	.....	.....
No. of female partners .....	.....	.....	.....	.....
Total No. of partners	6	6	.....	.....
No. of corporations	3	3	.....	.....
No. of male stockholders	61	30	—	31 50.82
No. of female stockholders	10	4	—	6 60.00
Total No. of stockholders.....	71	34	—	37 52.11
Total No. of partners and stockholders	77	40	—	37 48.06
Amount of capital invested.....	\$582,728 52	\$550,561 79	—	\$32,166 73 5.52
Value of goods made or work done	482,492 75	439,052 93	—	43,439 82 9.00
Amount paid as wages	34,550 15	39,723 00	+	5,172 85 14.97
Av. capital to each person employed	7,667 48	6,554 31	—	1,113 17 14.52
Av. product to each person employed	6,348 59	5,226 82	—	1,121 77 17.67

PAPER AND CIGAR BOXES—11 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1900				1901			
	Male.	Female.	TOTAL.		Male.	Female.	TOTAL.	
			No.	Per ct.			No.	Per ct.
Under \$5.00	70	287	357	51.97	81	334	415	55.56
\$5.00 but under \$6.00	23	51	74	10.77	24	77	101	13.52
6.00 but under 7.00	19	74	93	13.52	20	73	93	12.45
7.00 but under 8.00	15	33	48	6.99	17	27	44	5.89
8.00 but under 9.00	13	2	15	2.19	11	.....	11	1.47
9.00 but under 10.00	22	4	26	3.79	25	.....	25	3.34
10.00 but under 12.00	21	1	22	3.20	22	.....	22	2.96
12.00 but under 15.00	36	.....	36	5.24	21	.....	21	2.81
15.00 but under 20.00	13	.....	13	1.89	11	.....	11	1.47
20.00 and over	3	.....	3	.44	4	.....	4	.54
Total	235	452	687	100.00	236	511	747	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1900.	1901.	1900.	1901.	1900.	1901.
January	616	538	92.63	71.73	7.39	28.27
February	622	621	93.53	82.80	6.47	17.20
March	625	662	93.98	66.27	6.02	33.73
April	636	697	95.64	92.93	4.36	7.07
May	638	723	94.94	96.40	4.06	3.60
June	629	727	94.60	96.93	5.40	3.07
July	624	720	93.83	96.00	6.17	4.00
August	623	725	93.68	96.67	6.32	3.33
September	619	730	93.06	97.33	6.92	2.67
October	637	733	95.79	97.73	4.21	2.27
November	653	700	98.19	100.00	1.81	.....
December	665	741	100.00	98.80	.....	1.20

3. Other Presentations.

CLASSIFICATION.	1900.	1901.	INCREASE OR DECREASE IN 1901.	
			Amount.	Per ct.
Smallest No. of persons employed..	616	538	—	78
Greatest No. of persons employed..	665	750	+	86
Average No. of persons employed..	632	697	+	65
Average yearly earnings	\$246 27	\$210 39	—	\$35 88
Average time in operation, days....	288.18	296.82	+	8.64
No. of private firms	9	9	—	.....
No. of male partners	16	13	—	3
No. of female partners	1	3	+	2
Total No. of partners	17	16	—	1
No. of corporations	2	2	—	.....
No. of male stockholders	9	6	—	3
No. of female stockholders	2	3	+	1
Total No. of stockholders	11	9	—	2
Total No. of partners and stockholders	28	25	—	3
Amount of capital invested	\$677,518 41	\$645,679 19	—	\$31,839 22
Value of goods made or work done	935,695 24	826,620 97	—	109,074 27
Amount paid as wages	155,643 78	146,640 75	—	9,003 03
Av. capital to each person employed	1,072 02	926 37	—	145 65
Av. product to each person employed	1,480 53	1,185 97	—	294 56

MANUFACTURERS' RETURNS FOR 1900-1901.

1003

PAPER AND PULP-31 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1900				1901			
	Male.	Fe-male.	TOTAL.		Male.	Fe-male.	Total.	
			No.	Per ct.			No.	Per ct.
Under \$5.00	100	662	762	17.05	93	709	802	16.13
\$5.00 but under \$6.00	115	70	185	4.15	83	66	149	3.00
6.00 but under 7.00	230	59	289	6.47	311	90	401	8.07
7.00 but under 8.00	451	17	468	10.47	443	19	462	9.29
8.00 but under 9.00	899	.....	899	20.12	881	18	899	18.07
9.00 but under 10.00	1,116	1	1,117	25.00	1,215	42	1,257	25.29
10.00 but under 12.00	311	.....	311	6.96	351	10	401	8.07
12.00 but under 15.00	168	.....	168	3.76	223	.....	223	4.49
15.00 but under 20.00	232	.....	232	5.19	333	10	343	6.90
20.00 and over	37	.....	37	.83	34	.....	34	.69
Total	3,659	809	4,468	100.00	4,007	964	4,971	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment		Unemployment.	
	1900.	1901	1900.	1901.	1900.	1901.
January	3,604	4,571	87.11	100.00	12.89	.....
February	3,644	4,541	88.08	99.34	11.92	.66
March	3,836	4,500	92.72	98.45	7.28	1.55
April	4,107	4,566	99.27	99.89	.73	.11
May	3,932	4,447	93.81	97.07	6.19	2.93
June	3,836	4,332	92.72	94.75	7.28	5.25
July	3,805	4,447	91.97	97.07	8.03	2.93
August	3,998	4,450	96.40	97.13	3.60	2.87
September	3,900	4,396	94.27	96.17	5.73	3.83
October	3,805	4,475	91.97	97.63	8.03	2.32
November	4,116	4,477	99.49	97.70	.51	2.30
December	4,137	4,408	100.00	96.43	.....	3.57

3. Other Presentations.

CLASSIFICATION.	1900.	1901.	INCREASE OR DECREASE IN 1901.	
			Amount.	Pct.
Smallest No. of persons employed..	3,604	4,332	+	728 20.20
Greatest No. of persons employed..	4,137	4,571	+	434 10.49
Average No. of persons employed..	3,888	4,468	+	580 14.92
Average yearly earnings	\$379.42	\$431.33	+	\$51.91 13.68
Average time in operation	293.32	300.42	+	7.10 2.42
No. of private firms	5	5	.....	.....
No. of male partners	11	11	.....	.....
No. of female partners .....	.....	.....	.....	.....
Total No. of partners	11	11	.....	.....
No. of corporations	26	26	.....	.....
No. of male stockholders	1,280	1,296	+	16 1.26
No. of female stockholders	546	551	+	5 .92
Total No. of stockholders	1,826	1,847	+	21 1.15
Total No. of partners and stockholders	1,837	1,858	+	21 1.14
Amount of capital invested	\$11,949,831.62	\$13,464,026.02	+	\$1,514,194.40 12.67
Value of goods made or work done	10,080,344.24	12,699,395.07	+	2,609,050.83 25.86
Amount paid as wages	1,475,193.46	1,927,165.49	+	451,972.03 30.64
Av. capital to each person employed	3,073.52	3,013.43	-	60.09 1.96
Av. product to each person employed	2,595.25	2,842.30	+	247.05 9.52

SADDLERY—6 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1900				1901			
	Male.	Fe-male.	TOTAL.		Male.	Fe-male.	TOTAL.	
			No.	Per ct			No.	Per ct.
Under \$5.00	36	92	128	40.13	34	63	97	30.03
\$5.00 but under \$6.00	10	24	34	10.66	17	18	35	10.84
6.00 but under 7.00	9	2	11	3.45	10	8	18	5.57
7.00 but under 8.00	17	2	19	5.95	16	3	19	5.88
8.00 but under 9.00	16	7	23	7.21	19	2	21	6.50
9.00 but under 10.00	14	.....	14	4.38	22	3	25	7.74
10.00 but under 12.00	35	.....	35	10.97	41	.....	41	12.69
12.00 but under \$15.00	33	.....	33	10.35	28	.....	28	8.66
15.00 but under 20.00	17	.....	17	5.33	25	.....	25	7.74
20.00 and over	5	.....	5	1.57	14	.....	14	4.35
Total	192	127	319	100.00	226	97	323	100.00

2. Number of Persons Employed, Range of Employment—By Months.

•MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1900.	1901.	1900.	1901.	1900.	1901.
January	211	220	71.05	71.17	28.95	28.83
February	225	238	75.75	77.02	24.25	22.98
March	246	249	82.82	80.58	17.18	19.42
April	254	227	80.32	73.47	14.63	26.53
May	267	226	89.89	72.81	10.11	27.19
June	232	225	84.84	72.49	15.16	27.51
July	233	218	78.45	70.55	21.55	29.45
August	220	304	74.07	98.38	25.93	1.62
September	192	302	64.64	97.73	35.36	2.27
October	220	306	74.07	99.03	25.93	.97
November	254	309	85.32	100.00	14.68	.....
December	297	294	100.00	95.15	.....	4.85

3. Other Presentations.

CLASSIFICATION.	1900.	1901.	INCREASE OR DECREASE IN 1901.	
			Amount.	Pct.
Smallest No. of persons employed..	192	218	+	26
Greatest No. of persons employed..	297	309	+	12
Average No. of persons employed..	229	260	+	21
Average yearly earnings.....	\$365 85	\$333 89	—	\$31 96
Average time in operation, days	302	240	—	62
No. of private firms	2	2	.....	.....
No. of male partners	6	6	.....	.....
No. of female partners	1	1	.....	.....
Total No. of partners	7	7	.....	.....
No. of corporations	4	4	.....	.....
No. of male stockholders	15	15	.....	.....
No. of female stockholders	2	3	+	1
Total No. of stockholders	17	18	+	1
Total No. of partners and stockholders	24	25	+	1
Amount of capital invested	\$179,800 76	\$233,971 37	+	\$54,171 01
Value of goods made or work done:	466,838 59	502,775 95	+	35,937 36
Amount paid as wages	87,438 79	86,813 65	—	625 14
Av. capital to each person employed	752 30	899 89	+	147 59
Av. product to each person employed	1,953 30	1,923 75	—	19 55

SASH, DOORS AND BLINDS—55 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1900				1901			
	Male.	Fe-male.	TOTAL.		Male.	Fe-male.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	437	6	443	13.82	429	7	436	12.45
\$5.00 but under \$8.00	113	1	114	3.55	172	.....	172	4.91
6.00 but under 7.00	265	1	267	8.33	248	3	251	7.17
7.00 but under 8.00	459	.....	459	14.32	445	1	446	12.73
8.00 but under 9.00	600	.....	600	15.59	600	.....	600	17.13
9.00 but under 10.00	492	.....	492	15.35	537	.....	537	15.34
10.00 but under 12.00	341	.....	341	10.64	406	.....	406	11.59
12.00 but under 15.00	443	.....	443	13.82	499	.....	499	14.25
15.00 but under 20.00	137	.....	137	4.27	147	.....	147	4.20
20.00 and over	10	.....	10	.31	8	.....	8	.23
Total	3,193	8	3,206	100.00	3,491	11	3,502	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
			1900.	1901.	1900.	1901.
January	2,089	2,633	74.82	83.85	25.18	16.15
February	2,460	2,752	88.11	87.64	11.89	12.38
March	2,579	2,831	92.37	90.16	7.63	9.84
April	2,711	2,978	97.10	94.84	2.90	5.16
May	2,696	3,022	96.56	96.24	3.44	3.76
June	2,652	3,056	94.99	97.32	5.01	2.68
July	2,549	3,140	91.30	100.00	8.70	.....
August	2,515	3,119	90.08	99.33	9.92	.67
September	2,658	3,040	95.20	96.82	4.80	3.18
October	2,654	3,067	95.06	97.36	4.94	2.64
November	2,792	3,062	100.00	97.52	.....	2.48
December	2,756	2,997	98.71	95.45	1.29	4.55

3. Other Presentations.

CLASSIFICATION.	1900.	1901.	INCREASE OR DECREASE IN 1901.	
			Amount.	Prct.
Smallest No. of persons employed..	2,089	2,633	+ 5 44	26.04
Greatest No. of persons employed..	2,792	3,140	+ 348	12.45
Average No. of persons employed..	2,593	2,974	+ 381	14.69
Average yearly earnings	\$377.99	\$387.84	+ \$9.85	2.61
Average time in operation, days....	272	286	+ 13	4.78
No. of private firms	26	27	+ 1	3.85
No. of male partners	44	45	+ 1	2.27
No. of female partners .....	.....	.....	.....	.....
Total No. of partners	44	45	+ 1	2.27
No. of corporations	29	28	- 1	3.45
No. of male stockholders	152	150	- 2	1.32
No. of female stockholders	13	13	.....	.....
Total No. of stockholders	165	163	- 2	1.21
Total No. of partners and stockholders	209	208	- 1	.48
Amount of capital invested	\$3,277,059.44	\$3,941,628.06	+ \$664,568.64	20.28
Value of goods made or work done.	5,068,839.02	5,875,235.45	+ 806,396.43	15.91
Amount paid as wages	980,120.94	1,153,426.73	+ 173,305.79	17.68
Av. capital to each person employed	1,263.81	1,325.36	+ 61.55	4.87
Av. product to each person employed	1,954.82	1,975.54	+ 20.72	1.06

SHEET METAL—21 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1900				1901			
	Male.	Fe-male.	TOTAL.		Male.	Fe-male.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	574	353	927	42.36	906	236	1,091	39.26
\$5.00 but under \$6.00	187	28	215	9.87	262	17	279	10.04
6.00 but under 7.00	208	4	212	9.69	204	1	205	7.38
7.00 but under 8.00	153	1	154	7.03	278	.....	278	10.60
8.00 but under 9.00	150	.....	150	6.85	173	1	174	6.23
9.00 but under 10.00	157	.....	157	7.17	220	.....	220	7.92
10.00 but under 12.00	144	.....	144	6.58	213	.....	213	7.66
12.00 but under 15.00	127	.....	127	5.80	168	.....	168	6.06
15.00 but under 20.00	75	.....	75	3.42	111	.....	111	3.99
20.00 and over	27	.....	27	1.23	40	.....	40	1.44
Total	1,802	383	2,188	100.00	2,474	305	2,779	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1900.	1901.	1900.	1901.	1900.	1901.
January	1,812	2,099	87.45	79.33	12.55	20.67
February	1,868	2,241	90.15	84.89	9.85	15.31
March	1,864	2,363	90.00	89.45	10.00	10.55
April	1,798	2,404	86.77	90.85	13.23	9.15
May	1,717	2,418	82.87	91.38	17.13	8.62
June	1,527	2,423	73.70	91.57	26.30	8.43
July	1,903	2,553	91.36	96.49	8.64	3.51
August	1,969	2,639	96.00	99.74	4.00	.26
September	2,011	2,646	97.06	100.00	2.94	.....
October	2,072	2,634	100.00	99.55	.....	.45
November	1,756	2,609	84.75	98.60	15.25	1.40
December	1,795	2,434	86.63	91.99	13.37	8.01

3. Other Presentations.

CLASSIFICATION.	1900.	1901.	INCREASE OR DECREASE IN 1901.		
			Amount.	Pct.	
Smallest No. of persons employed..	1,527	2,099	+	572	37.46
Greatest No. of persons employed..	2,072	2,646	+	574	27.79
Average No. of persons employed..	1,843	2,456	+	613	33.26
Average yearly earnings	\$305 17	\$305 14	—	\$0.03	.01
Average time in operation, days....	303.33	302.81	—	.52	.17
No. of private firms	16	16	—	—	—
No. of male partners	29	28	—	1	3.45
No. of female partners	—	—	—	—	—
Total No. of partners	29	28	—	1	3.45
No. of corporations	5	5	—	—	—
No. of male stockholders	17	17	—	—	—
No. of female stockholders	3	3	—	—	—
Total No. of stockholders	20	20	—	—	—
Total No. of partners and stockholders	49	48	—	1	2.04
Amount of capital invested	\$2,710,765 65	\$2,980,575 92	+	\$269,810 27	9.95
Value of goods made or work done..	3,058,643 66	4,081,174 06	+	1,022,530 39	33.43
Amount paid as wages	562,429 95	749,418 36	+	186,988 41	33.25
Av. capital to each person employed	1,470 84	1,213 59	—	257 25	17.49
Av. product to each person employed	1,659 60	1,661 72	+	2 12	.13

SHIP BUILDING—7 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1900				1901			
	Male.	Fe-male.	TOTAL.		Male.	Fe-male.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	4	.....	4	.29	4	.....	4	.26
\$5.00 but under \$6.00	3	3	6	.43	10	1	11	.71
6.00 but under 7.00	13	.....	13	.93	18	.....	18	1.17
7.00 but under 8.00	50	.....	50	3.58	119	2	121	7.84
8.00 but under 9.00	154	.....	154	11.03	44	.....	44	2.85
9.00 but under 10.00	276	.....	276	19.77	366	.....	366	23.72
10.00 but under 12.00	248	.....	248	17.77	298	.....	298	19.31
12.00 but under 15.00	283	.....	283	20.27	298	2	300	19.44
15.00 but under 20.00	306	.....	306	21.92	326	.....	326	21.13
20.00 and over	56	.....	56	4.01	55	.....	55	3.57
Total	1,393	3	1,396	100.00	1,538	5	1,543	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1900.	1901.	1900.	1901.	1900.	1901.
January	854	966	67.99	68.71	32.01	31.29
February	929	1,104	73.96	78.52	26.04	21.48
March	1,193	1,340	94.98	95.31	5.02	4.64
April	1,253	1,406	99.76	100.00	.24	.....
May	1,256	1,289	100.00	91.68	.....	8.32
June	1,048	1,205	83.44	85.70	16.56	14.30
July	783	970	62.34	68.99	37.66	31.01
August	591	711	47.05	50.57	52.95	49.43
September	710	829	56.53	58.96	43.47	41.04
October	630	757	50.16	53.84	49.84	46.16
November	627	711	49.32	50.57	50.68	49.43
December	678	692	53.98	49.22	46.02	50.78

3. Other Presentations.

CLASSIFICATION.	1900.	1901.	INCREASE OR DECREASE IN 1901.		
			Amount.	Pr ct.	
Smallest No. of persons employed..	591	692	+	101	17.09
Greatest No. of persons employed..	1,256	1,406	+	150	11.94
Average No. of persons employed..	879	998	+	119	13.54
Average yearly earnings	\$474 62	\$502 27	+	\$27 65	5.83
Average time in operation, days....	292.14	252.43	—	39.71	13.59
No. of private firms	3	3			.....
No. of male partners	5	5			.....
No. of female partners .....					.....
Total No. of partners	5	5			.....
No. of corporations	4	4			.....
No. of male stockholders	17	17			.....
No. of female stockholders	2	3	+	1	50.00
Total No. of stockholders	19	20	+	1	5.26
Total No. of partners and stockholders	24	25	+	1	4.17
Amount of capital invested	\$1,158,444 32	\$1,194,290 74	+	\$35,846 42	3.09
Value of goods made or work done..	1,227,269 40	1,313,326 79	+	86,057 39	7.01
Amount paid as wages	417,187 25	501,260 67	+	84,073 42	20.15
Av. capital to each person employed	1,317 91	1,196 65	—	121 26	9.20
Av. product to each person employed	1,396 21	1,315 96	—	80 25	5.75

SOAP—7 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1900				1901			
	Male.	Fe-male.	TOTAL.		Male	Fe-male.	TOTAL.	
			No.	Pr. ct			No.	Pr. ct.
Under \$5.00	7	42	49	30.06	7	43	50	30.67
\$5.00 but under \$6.00	7	31	35	21.47	5	30	35	21.47
6.00 but under 7.00	4	.....	7	4.30	8	.....	8	4.91
7.00 but under 8.00	11	.....	11	6.75	9	.....	9	5.62
8.00 but under 9.00	21	.....	21	12.88	22	.....	22	13.60
9.00 but under 10.00	17	.....	17	10.43	14	.....	14	8.59
10.00 but under 12.00	10	.....	10	6.14	10	.....	10	6.14
12.00 but under 15.00	9	.....	9	5.52	12	.....	12	7.36
15.00 but under 20.00	3	.....	3	1.84	2	.....	2	1.23
20.00 and over	1	.....	1	.61	1	.....	1	.61
Total	90	73	163	100.00	90	73	163	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1900.	1901.	1900.	1901.	1900.	1901.
January	161	158	98.77	98.14	1.23	1.86
February	160	161	98.16	100.00	1.84	.....
March	162	159	99.39	98.76	.61	1.24
April	163	161	100.00	100.00	.....	.....
May	160	159	98.16	98.76	1.84	1.24
June	158	157	96.93	97.52	3.07	2.48
July	152	150	93.25	93.17	6.75	6.83
August	149	151	91.41	93.79	8.59	6.21
September	149	152	91.41	94.41	8.59	5.59
October	138	145	84.66	90.06	15.34	9.94
November	138	142	84.66	88.20	15.34	11.80
December	132	136	80.98	84.47	19.02	15.53

3. Other Presentations.

CLASSIFICATION.	1900.	1901.	INCREASE OR DECREASE IN 1901.	
			Amount.	Prct.
Smallest No. of persons employed..	132	136	+	4 3.03
Greatest No. of persons employed..	163	161	-	2 1.23
Average No. of persons employed..	152	153	+	1 .66
Average yearly earnings	\$296 23	\$301 21	+	\$4 98 1.68
Average time in operation, days....	298.00	295.14	-	2.86 .96
No. of private firms	5	5	.....	.....
No. of male partners	8	8	.....	.....
No. of female partners	1	1	.....	.....
Total No. of partners	9	9	.....	.....
No. of corporations	2	2	.....	.....
No. of male stockholders	39	12	-	27 69.23
No. of female stockholders	2	.....	-	2
Total No. of stockholders	41	12	-	29 70.73
Total No. of partners and stockholders	50	21	-	29 58.00
Amount of capital invested	\$317,944 52	\$346,766 62	+	\$28,822 10 9.06
Value of goods made or work done.	695,260 56	721,885 86	+	26,625 30 3.83
Amount paid as wages	45,026 33	46,065 69	+	1,039 36 2.35
Av. capital to each person employed	2,091 74	2,266 45	+	174 71 8.35
Av. product to each person employed	4,574 08	4,718 21	+	144 13 3.15

MANUFACTURERS' RETURNS FOR 1900-1901.

1009

STAVES—12 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1900				1901			
	Male.	Fe-male.	TOTAL.		Male.	Fe-male.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	32	.....	32	9.50	27	.....	27	7.07
\$5.00 but under \$6.00	12	.....	12	3.56	5	.....	5	1.31
6.00 but under \$7.00	27	.....	27	8.01	49	.....	49	12.53
7.00 but under 8.00	66	.....	66	19.58	66	.....	66	17.28
8.00 but under 9.00	66	.....	66	19.58	61	.....	61	15.97
9.00 but under 10.00	50	.....	50	14.84	114	.....	114	29.84
10.00 but under 12.00	36	.....	36	10.68	33	.....	33	8.64
12.00 but under 15.00	19	.....	19	5.64	10	.....	10	2.61
15.00 but under 20.00	24	.....	24	7.12	17	.....	17	4.45
20.00 and over	5	.....	5	1.49	.....	.....	.....	.....
Total	337	.....	337	100.00	382	.....	382	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1900.	1901.	1900.	1901.	1900.	1901.
January	224	279	70.00	78.59	30.00	21.41
February	240	291	75.00	81.97	25.00	18.03
March	291	320	90.94	95.77	9.06	4.23
April	293	345	91.56	97.46	8.44	2.54
May	303	355	94.38	100.00	5.62	.....
June	320	349	100.00	98.31	.....	1.69
July	295	302	92.19	85.07	7.81	14.93
August	265	292	82.81	82.25	17.19	17.75
September	229	266	71.56	74.93	28.44	25.07
October	219	255	64.44	71.83	35.56	28.17
November	226	253	70.63	71.27	29.37	28.73
December	236	243	76.75	68.45	23.25	31.55

3. Other Presentations.

CLASSIFICATION.	1900.	1901.	INCREASE OR DECREASE IN 1901.	
			Amount.	Pct.
Smallest No. of persons employed..	219	243	+	24
Greatest No. of persons employed..	320	355	+	35
Average No. of persons employed..	262	296	+	34
Average yearly earnings	\$21.26	\$21.63	+	\$0.37
Average time in operation, days....	221.33	225.67	+	4.34
No. of private firms	7	8	+	1
No. of male partners	13	15	+	2
No. of female partners .....	.....	.....	.....	.....
Total No. of partners	13	15	+	2
No. of corporations	5	4	-	1
No. of male stockholders	18	15	-	3
No. of female stockholders	1	1	.....	.....
Total No. of stockholders	19	16	-	3
Total No. of partners and stockholders	32	31	-	1
Amount of capital invested	\$183,802.65	\$201,794.68	+	\$17,994.03
Value of goods made or work done.	300,319.53	335,927.04	+	35,607.51
Amount paid as wages	86,790.18	98,162.12	+	11,371.94
Av. capital to each person employed	701.54	681.75	-	19.79
Av. product to each person employed	1,146.26	1,134.89	-	11.37

STONE-15 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1900				1901			
	Male.	Fe- male	TOTAL.		Male	Fe- male.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	9	.....	9	1.89	5	.....	5	1.01
\$5.00 but under \$6.00	4	.....	4	.84	3	.....	3	.61
6.00 but under 7.00	4	.....	4	.84	5	.....	5	1.01
7.00 but under 8.00	59	.....	59	12.37	58	.....	58	11.74
8.00 but under 9.00	43	.....	43	9.01	44	.....	44	8.91
9.00 but under 10.00	43	.....	43	9.01	36	.....	36	7.29
10.00 but under 12.00	51	.....	51	10.69	65	.....	65	13.16
12.00 but under 15.00	102	.....	102	21.39	103	.....	103	20.85
15.00 but under 20.00	101	.....	101	21.17	71	.....	71	14.37
20.00 and over	61	.....	61	12.79	104	.....	104	21.06
Total	477	.....	477	100.00	494	.....	494	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL N. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment	
	1900.	1901.	1900.	1901.	1900.	1901.
January	212	256	48.62	57.14	51.38	42.86
February	173	233	39.68	52.23	60.32	47.77
March	230	289	52.75	64.51	47.25	35.49
April	368	405	84.40	90.40	15.60	9.60
May	388	420	88.99	93.75	11.01	6.25
June	408	432	93.58	95.43	6.42	3.57
July	436	426	100.00	95.69	.....	4.91
August	433	448	99.31	100.00	.69	.....
September	418	416	95.87	92.86	4.13	7.14
October	345	361	79.13	80.57	20.87	19.43
November	282	330	64.68	73.66	35.32	26.34
December	210	257	58.94	57.37	41.06	42.63

3. Other Presentations.

CLASSIFICATION.	1900.	1901.	INCREASE OR DECREASE IN 1901.	
			Amount.	Pct.
Smallest No. of persons employed..	173	233	+	34.68
Greatest No. of persons employed..	436	448	+	2.75
Average No. of persons employed..	325	356	+	9.54
Average yearly earnings	\$560.49	\$562.64	+	.38
Average time in operation, days....	261.13	263.47	+	.90
No. of private firms	11	10	—	9.09
No. of male partners	18	19	+	5.56
No. of female partners	2	1	—	50.00
Total No. of partners	20	20	.....	.....
No. of corporations	4	5	+	25.00
No. of male stockholders	25	25	.....	.....
No. of female stockholders .....	.....	.....	.....	.....
Total No. of stockholders	25	25	.....	.....
Total No. of partners and stockholders	45	45	.....	.....
Amount of capital invested	\$597,872.71	\$651,229.24	+	\$53,356.53 8.92
Value of goods made or work done.	\$25,111.50	\$91,397.79	+	\$66,286.29 261.67
Amount paid as wages	182,157.80	200,298.30	+	18,140.50 9.96
Av. capital to each person employed	1,829.61	1,829.30	—	10.31 .56
Av. product to each person employed	1,615.73	1,942.13	+	\$326.40 20.20

TOYS-6 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1900				1901			
	Male.	Fe-male.	TOTAL.		Male	Fe-male.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	166	26	192	30.29	131	44	175	27.34
\$5.00 but under \$6.00	47	1	48	7.57	53	7	60	9.38
6.00 but under 7.00	184	.....	184	29.02	136	.....	136	21.25
7.00 but under 8.00	69	.....	69	10.88	93	.....	93	14.53
8.00 but under 9.00	61	.....	61	9.62	60	.....	60	9.38
9.00 but under 10.00	25	.....	25	3.94	46	.....	46	7.19
10.00 but under 12.00	24	.....	24	3.79	23	.....	23	3.59
12.00 but under 15.00	17	.....	17	2.68	29	.....	29	4.53
15.00 but under 20.00	11	.....	11	1.74	11	.....	11	1.72
20.00 and over	3	.....	3	.47	7	.....	7	1.09
Total	607	27	634	100.00	589	51	640	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1900.	1901.	1900.	1901.	1901.	1901.
January	590	524	98.83	82.00	1.17	18.00
February	595	515	99.66	80.19	.34	19.41
March	597	531	100.00	83.10	.....	16.90
April	542	504	90.79	78.87	9.21	21.13
May	533	522	89.28	81.69	10.72	18.31
June	530	526	88.78	82.32	11.22	17.68
July	527	575	88.27	89.98	11.73	10.02
August	546	593	91.46	92.80	8.54	7.20
September	566	601	94.81	94.05	5.19	5.95
October	563	623	94.30	97.50	5.70	2.50
November	574	639	96.15	100.00	3.85	.....
December	544	600	91.12	93.90	8.88	6.10

3. Other Presentations.

CLASSIFICATION.	1900.	1901.	INCREASE OR DECREASE IN 1901.	
			Amount.	Prct.
Smallest No. of persons employed..	527	504	—	4.36
Greatest No. of persons employed..	597	639	+	7.04
Average No. of persons employed..	559	563	+	.72
Average yearly earnings	\$287 45	\$290 91	+	1.20
Average time in operation, days....	279.50	278.50	—	.36
No. of private firms	3	3	.....	.....
No. of male partners	5	6	+	20.00
No. of female partners .....	.....	2	+	2
Total No. of partners	5	8	+	60.00
No. of corporations	3	3	.....	.....
No. of male stockholders	7	7	.....	.....
No. of female stockholders	3	2	—	33.33
Total No. of stockholders	10	9	—	10.00
Total No. of partners and stockholders	15	17	+	13.33
Amount of capital invested	\$573,561 78	\$633,242 00	+	10.41
Value of goods made or work done.	542,824 57	560,491 59	+	3.25
Amount paid as wages	160,686 45	163,782 46	+	1.93
Av. capital to each person employed	1,028 05	1,194 76	+	9.62
Av. product to each person employed	971 06	995 54	+	2.52

TRUNKS—9 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1900				1901			
	Male.	Fe- male.	TOTAL.		Male.	Fe- male.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	178	150	328	35.61	151	131	282	31.30
\$5.00 but under \$6.00	54	40	94	10.21	53	36	89	9.88
6.00 but under 7.00	56	16	72	7.82	64	21	85	9.43
7.00 but under 8.00	95	.....	95	10.32	96	.....	96	10.65
8.00 but under 9.00	97	1	98	10.64	81	1	82	9.10
9.00 but under 10.00	75	1	76	8.25	84	1	85	9.43
10.00 but under 12.00	81	.....	81	8.79	95	.....	95	10.54
12.00 but under 15.00	50	.....	50	5.43	60	.....	60	6.66
15.00 but under 20.00	23	.....	23	2.50	25	.....	25	2.78
20.00 and over	4	.....	4	.43	2	.....	2	.23
Total	713	208	921	100.00	711	190	901	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
			1900.	1901.	1900.	1901.
January	802	819	91.55	94.90	8.45	5.10
February	828	834	94.62	96.64	5.43	3.36
March	859	863	98.06	100.00	1.94	.....
April	858	862	97.95	99.88	2.05	.12
May	864	859	98.63	99.54	1.37	.46
June	869	848	99.20	98.26	.80	1.74
July	862	837	98.40	96.99	1.60	3.01
August	863	845	98.52	97.91	1.48	2.09
September	876	827	100.00	95.83	.....	4.17
October	851	843	97.15	97.68	2.85	2.32
November	834	826	95.21	95.71	4.79	4.29
December	813	803	92.81	93.05	7.19	6.95

3. Other Presentations.

CLASSIFICATION.	1900.	1901.	INCREASE OR DECREASE IN 1901.	
			Amount.	Prct.
Smallest No. of persons employed..	802	803	+	1 .12
Greatest No. of persons employed..	876	863	-	13 1.48
Average No. of persons employed..	848	839	-	9 1.06
Average yearly earnings	\$324 24	\$336 11	+	\$11.87 3.66
Average time in operation	224	298	+	74 33.04
No. of private firms	1	1	.....	.....
No. of male partners	3	2	-	1 33.33
No. of female partners .....	.....	1	+	1
Total No. of partners	3	3	.....	.....
No. of corporations	8	8	.....	.....
No. of male stockholders	48	44	-	4 8.33
No. of female stockholders	19	19	.....	.....
Total No. of stockholders	67	63	-	4 5.97
Total No. of partners and stockholders	70	66	-	4 5.71
Amount of capital invested	\$1,102,663 18	\$1,247,250 00	+	\$144,586 82 13.11
Value of goods made or work done	1,459,747 34	1,491,000 00	+	31,252 66 2.14
Amount paid as wages	274,956 06	281,993 00	+	7,036 94 2.56
Av. capital to each person employed	1,300 31	1,486 59	+	186 28 14.33
Av. product to each person employed	1,721 40	1,777 12	+	55 72 3.24

VENEER-9 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1900				1901			
	Male.	Female.	TOTAL.		Male.	Female.	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	78	.....	78	11.05	71	.....	71	9.18
\$5.00 but under \$6.00	28	.....	28	3.97	32	.....	32	4.13
6.00 but under 7.00	77	.....	77	10.91	95	.....	95	12.30
7.00 but under 8.00	159	.....	159	22.52	104	.....	104	13.46
8.00 but under 9.00	86	.....	86	12.18	136	.....	136	17.70
9.00 but under 10.00	151	.....	151	21.29	183	.....	183	23.69
10.00 but under 12.00	69	.....	69	9.77	90	.....	90	11.66
12.00 but under 15.00	37	.....	37	5.24	39	.....	39	5.04
15.00 but under 20.00	21	.....	21	2.97	22	.....	22	2.84
20.00 and over .....	.....	.....	.....	.....	.....	.....	.....	.....
Total	706	.....	706	100.00	772	.....	772	100.00

2. Number of Persons Employed, Range of Employment—By Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1900.	1901.	1900.	1901.	1900.	1901.
January	488	556	85.16	85.02	14.84	14.98
February	526	567	91.80	80.70	8.20	19.30
March	516	567	90.05	80.70	9.95	19.30
April	537	654	93.72	100.00	6.28	.....
May	548	639	95.64	87.70	4.36	12.30
June	573	652	100.00	99.69	.....	0.31
July	527	613	91.97	93.73	8.03	6.27
August	556	643	97.03	98.32	2.97	1.68
September	531	624	92.67	95.41	7.33	4.59
October	493	564	86.04	86.23	13.96	13.77
November	439	478	76.61	73.09	23.39	26.91
December	518	587	90.40	89.76	9.60	10.24

3. Other Presentations.

CLASSIFICATION.	1900.	1901.	INCREASE OR DECREASE IN 1901.	
			Amount.	Pct.
Smallest No. of persons employed..	439	478	+	39
Greatest No. of persons employed..	573	654	+	81
Average No. of persons employed..	521	595	+	74
Average yearly earnings	\$326 81	\$313 50	—	\$13 31
Average time in operation, days....	266.89	286.44	+	19.55
No. of private firms	3	3	.....	.....
No. of male partners	4	4	.....	.....
No. of female partners .....	.....	.....	.....	.....
Total No. of partners	4	4	.....	.....
No. of corporations	6	6	.....	.....
No. of male stockholders	22	29	+	7
No. of female stockholders	4	5	+	1
Total No. of stockholders	26	34	+	8
Total No. of partners and stockholders	30	38	+	8
Amount of capital invested	\$601,961 80	\$775,033 20	+	\$173,071 40
Value of goods made or work done	632,259 91	652,436 73	+	20,176 82
Amount paid as wages	170,267 50	186,534 28	+	16,266 78
Av. capital to each person employed	1,155 40	1,302 58	+	147 18
Av. product to each person employed	1,213 55	1,096 53	—	117 02

WAGONS—55 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1900				1901			
	Male	Female	TOTAL.		Male	Female	TOTAL.	
			No.	Pr. ct.			No.	Pr. ct.
Under \$5.00	142	21	163	5.29	128	14	142	4.35
\$5.00 but under \$6.00	88	3	91	2.95	102	12	114	3.45
6.00 but under 7.00	208	4	212	6.88	191	7	198	6.10
7.00 but under 8.00	444	12	456	14.80	414	8	422	12.79
8.00 but under 9.00	344	.....	344	11.16	403	4	407	12.34
9.00 but under 10.00	549	3	552	17.92	596	2	598	18.13
10.00 but under 12.00	444	.....	444	14.41	466	.....	466	14.12
12.00 but under 15.00	519	.....	519	16.85	612	.....	612	18.54
15.00 but under 20.00	245	.....	245	7.93	265	.....	265	8.08
20.00 and over	55	.....	55	1.73	74	.....	74	2.24
Total	3,638	43	3,681	100.00	3,251	47	3,298	100.00

2. Number of Persons Employed, Range of Employment—by Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1901.	1901.	1900.	1901.	1900.	1901.
January	2,829	2,834	96.85	92.03	3.15	7.97
February	2,832	2,864	96.92	93.08	3.08	6.92
March	2,921	2,999	100.00	97.46	.....	2.54
April	2,903	3,067	99.38	99.35	.....	.63
May	2,822	3,077	96.61	100.00	3.39	.....
June	2,833	3,077	98.70	100.00	1.30	.....
July	2,823	3,071	96.65	99.81	3.35	.19
August	2,673	2,885	95.51	93.76	4.49	6.24
September	2,605	2,846	89.15	92.49	10.85	7.51
October	2,603	2,773	89.11	93.27	10.89	6.63
November	2,665	2,810	91.24	91.32	8.76	8.68
December	2,761	2,903	94.52	94.31	5.48	5.69

3. Other Presentations.

CLASSIFICATION.	1900.	1901.	INCREASE OR DECREASE IN 1901.		
			Amount.	Per.	
Smallest No. of persons employed..	2,603	2,773	+	170	6.53
Greatest No. of persons employed..	2,921	3,077	+	156	5.34
Average No. of persons employed..	2,773	2,933	+	160	5.77
Average yearly earnings	\$443 06	\$470 38	+	\$27 33	6.17
Average time in operation, days....	285.40	291.04	+	5.64	1.96
No. of private firms	35	35	.....	.....	.....
No. of male partners	50	51	+	1	2.00
No. of female partners	3	2	-	1	33.33
Total No. of partners	53	53	.....	.....	.....
No. of corporations	20	20	.....	.....	.....
No. of male stockholders	271	299	+	28	10.33
No. of female stockholders	106	96	-	11	10.38
Total No. of stockholders	377	394	+	17	4.51
Total No. of partners and stockholders	430	447	+	17	3.95
Amount of capital invested	\$58,624,445 56	\$6,803,652 78	+	\$94,207 22	16.35
Value of goods made or work done	5,629,297 81	6,375,566 04	+	746,268 23	13.25
Amount paid as wages	1,228,578 70	1,379,627 16	+	151,048 46	12.29
Av. capital to each person employed	2,114 12	2,319 69	+	205 57	9.72
Av. product to each person employed	2,030 04	2,173 74	+	143 70	7.07

MANUFACTURERS' RETURNS FOR 1900-1901.

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WOODENWARE—9 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1900				1901			
	Male.	Fe-male.	TOTAL.		Male.	Fe-male.	TOTAL.	
			No.	Perct.			No.	Per ct.
Under \$5.00	46	7	53	11.49	49	6	55	11.48
\$5.00 but under \$6.00	26	.....	26	5.64	28	.....	28	5.86
6.00 but under 7.00	76	.....	76	16.49	79	.....	79	16.49
7.00 but under 8.00	106	4	109	23.64	107	4	111	23.17
8.00 but under 9.00	58	1	59	12.80	60	1	61	12.75
9.00 but under 10.00	63	1	64	13.88	67	1	68	14.19
10.00 but under 12.00	46	.....	46	9.98	47	.....	47	9.81
12.00 but under 15.00	5	.....	5	1.09	6	.....	6	1.25
15.00 but under 20.00	16	.....	16	3.47	18	.....	18	3.76
20.00 and over	6	1	7	1.52	6	.....	6	1.25
Total	447	14	461	100.00	467	12	479	100.00

2. Number of Persons Employed, Range of Employment—by Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1900.	1901.	1900.	1901.	1900.	1901.
January	307	376	70.25	83.37	29.75	16.63
February	313	379	71.62	84.04	28.38	15.96
March	330	382	75.51	84.71	24.49	15.39
April	344	387	78.72	85.81	21.28	14.19
May	403	443	92.22	98.23	7.78	1.77
June	404	445	92.45	98.67	7.55	1.33
July	417	451	95.42	100.00	4.58	.....
August	416	449	95.19	99.56	4.81	.44
September	421	449	96.34	99.56	3.66	.44
October	414	439	94.73	97.34	5.27	2.66
November	437	450	100.00	99.78	.....	.22
December	428	440	97.94	97.56	2.06	2.44

3. Other Presentations.

CLASSIFICATION.	1900.	1901.	INCREASE OR DECREASE IN 1901.		
			Amount.	Pct.	
Smallest No. of persons employed..	307	376	+	69	22.48
Greatest No. of persons employed..	437	451	+	14	3.20
Average No. of persons employed..	386	424	+	38	9.84
Average yearly earnings	\$355.05	\$376.28	+	\$21.23	5.98
Average time in operation, days....	248.33	259.22	—	9.11	3.67
No. of private firms	5	5			
No. of male partners	7	7			
No. of female partners					
Total No. of partners	7	7			
No. of corporations	1	4			
No. of male stockholders	22	22			
No. of female stockholders					
Total No. of stockholders	22	22			
Total No. of partners and stockholders	29	29			
Amount of capital invested	\$428,483.20	\$556,229.98	+	\$127,746.78	29.82
Value of goods made or work done	409,500.41	474,958.08	+	72,458.08	18.00
Amount paid as wages	127,050.00	159,544.46	+	22,494.46	16.41
Av. capital to each person employed	1,110.06	1,311.89	+	201.83	18.18
Av. product to each person employed	1,042.75	1,120.18	+	77.43	7.43

WOOLEN GOODS—17 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1900				1901			
	Male.	Fe-male.	TOTAL.		Male.	Fe-male.	TOTAL.	
			No.	Per ct.			No.	Per ct.
Under \$5.00	102	297	399	37.25	96	277	373	36.57
\$5.00 but under \$6.00	24	60	84	7.84	26	58	84	8.23
6.00 but under 7.00	103	72	175	16.34	75	60	135	13.24
7.00 but under 8.00	72	64	136	12.70	60	46	106	10.19
8.00 but under 9.00	39	22	61	5.70	52	38	90	8.82
9.00 but under 10.00	57	31	88	8.22	51	43	94	9.22
10.00 but under 12.00	50	15	65	6.07	73	4	77	7.55
12.00 but under 15.00	20	.....	20	1.87	19	.....	19	1.86
15.00 but under 20.00	35	.....	35	3.27	37	.....	37	3.63
20.00 and over	8	.....	8	.74	5	.....	5	.49
Total	510	561	1,071	100.00	494	526	1,020	100.00

2. Number of Persons Employed, Range of Employment—by Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
			1900.	1901.	1900.	1901.
January	1,019	989	100.00	98.70	.....	1.30
February	1,017	971	99.80	98.91	20	3.09
March	1,010	952	99.12	95.01	88	4.99
April	999	966	98.04	96.41	196	3.59
May	985	966	96.66	96.41	334	3.69
June	885	938	86.86	93.61	315	6.39
July	978	962	96.96	95.01	402	4.99
August	938	928	91.07	92.61	893	7.39
September	948	1,002	93.03	100.00	697	.....
October	982	997	96.37	99.50	363	.50
November	915	971	89.79	96.91	1021	3.09
December	931	951	91.36	94.91	864	5.09

3. Other Presentations.

CLASSIFICATION.	1900.	1901.	INCREASE OR DECREASE IN 1901.		
			Amount.	Pr ct.	
Smallest No. of persons employed..	885	928	+	43	4.86
Greatest No. of persons employed..	1,019	1,002	—	17	1.67
Average No. of persons employed..	967	966	—	2	.21
Average yearly earnings	\$317 60	\$315 06	—	\$2 54	.80
Average time in operation, days ..	276.06	276.12	+	.06	.02
No. of private firms	7	7	—	—	—
No. of male partners	11	11	—	—	—
No. of female partners	3	4	+	1	33.33
Total No. of partners	14	15	+	1	7.14
No. of corporations	10	10	—	—	—
No. of male stockholders	73	74	+	1	1.37
No. of female stockholders	19	27	+	8	42.11
Total No. of stockholders	92	101	+	9	9.78
Total No. of partners and stockholders	106	116	+	10	9.43
Amount of capital invested.....	\$1,491,281 94	\$1,720,938 51	+	\$229,656 57	15.40
Value of goods made or work done	1,848,707 69	1,693,711 83	—	154,995 86	8.38
Amount paid as wages	307,116 65	304,037 46	—	3,079 19	1.00
Av. capital to each person employed	1,542 17	1,783 36	+	241 19	15.64
Av. product to each person employed	1,911 80	1,755 14	—	156 66	8.19

MANUFACTURERS' RETURNS FOR 1900-1901.

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MISCELLANEOUS—34 ESTABLISHMENTS.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1900				1901			
	Male.	Fe-male.	TOTAL.		Male.	Fe-male.	TOTAL.	
			No.	Per ct.			No.	Per ct.
Under \$5.00	313	528	841	29.02	264	568	832	27.27
\$5.00 but under \$6.00	90	211	301	1.39	93	202	295	9.67
6.00 but under 7.00	108	49	157	5.42	111	21	132	4.33
7.00 but under 8.00	163	14	177	6.11	148	22	170	5.67
8.00 but under 9.00	243	11	254	8.76	306	12	318	10.42
9.00 but under 10.00	339	10	349	12.04	543	8	551	18.06
10.00 but under 12.00	225	7	232	8.00	286	11	297	9.73
12.00 but under 15.00	138	1	139	4.80	167	1	168	5.51
15.00 but under 20.00	290	.....	290	10.01	102	1	103	3.38
20.00 and over	158	.....	158	5.45	185	.....	185	6.06
Total	2,067	831	2,898	100.00	2,205	846	3,051	100.00

2. Number of Persons Employed, Range of Employment—by Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
			1900.	1901.	1900.	1901.
January	1,945	1,749	77.80	78.64	22.20	21.36
February	2,059	1,941	82.36	87.28	17.64	12.72
March	2,228	2,092	89.12	94.06	10.88	5.94
April	2,387	2,106	95.48	94.69	4.52	5.31
May	2,500	2,074	100.00	93.26	.....	6.74
June	2,334	1,855	93.36	83.41	6.64	16.59
July	1,959	2,061	78.36	92.67	21.64	7.33
August	1,926	2,159	77.04	97.08	22.96	2.92
September	2,025	2,224	81.00	100.00	19.00	.....
October	2,152	2,210	86.08	99.37	13.92	.63
November	2,046	2,185	81.84	98.25	18.16	1.75
December	1,815	1,848	72.60	83.09	27.40	16.91

3. Other Presentations.

CLASSIFICATION.	1900.	1901.	INCREASE OR DECREASE IN 1901.		
			Amount.	Pct.	
Smallest No. of persons employed..	1,815	1,749	—	66	3.64
Greatest No. of persons employed..	2,500	2,224	—	276	11.04
Average No. of persons employed..	2,115	2,042	—	73	3.45
Average yearly earnings	\$382 61	\$416 78	+	\$34 17	8.93
Average time in operation, days ..	250	243	—	7	2.80
No. of private firms	10	9	—	1	10.00
No. of male partners	16	12	—	4	25.00
No. of female partners					
Total No. of partners	16	12	—	4	25.00
No. of corporations	24	25	+	1	4.17
No. of male stockholders	161	168	+	7	4.35
No. of female stockholders	24	24			
Total No. of stockholders	185	192	+	7	3.78
Total No. of partners and stockholders	201	204	+	3	1.49
Amount of capital invested	\$4,066,277 27	\$4,272,134 54	+	\$215,857 27	5.32
Value of goods made or work done ..	6,858,029 75	7,042,928 96	+	184,899 21	2.70
Amount paid as wages	809,229 10	851,060 34	+	41,831 24	5.17
Av. capital to each person employed ..	1,917 86	2,092 13	+	174 27	9.09
Av. product to each person employed ..	3,242 57	3,439 00	+	196 43	6.16

SUMMARY OF 42 INDUSTRIES.

1. Classified Weekly Earnings.

CLASSIFIED WEEKLY EARNINGS.	1900				1901			
	Male.	Fe- male.	TOTAL.		Male.	Fe- male.	TOTAL.	
			No.	Per ct.			No.	Per ct.
Under \$5.00	7,074	9,086	16,160	16.71	6,906	9,058	15,964	16.00
\$5.00 but under \$6.00	2,330	2,745	5,135	5.31	2,578	2,783	5,361	5.37
6.00 but under 7.00	6,241	1,269	7,510	7.77	5,717	1,331	7,048	7.07
7.00 but under 8.00	8,925	604	9,529	9.86	8,319	653	8,972	8.99
8.00 but under 9.00	10,730	316	11,046	11.42	10,454	346	10,800	10.83
9.00 but under 10.00	16,425	238	16,664	17.24	18,031	299	18,330	18.37
10.00 but under 12.00	11,675	150	11,825	12.23	13,146	181	13,327	13.36
12.00 but under 15.00	10,253	88	10,341	10.70	10,936	116	11,052	11.06
15.00 but under 20.00	6,425	12	6,437	6.66	6,759	30	6,789	6.81
20.00 and over	2,025	3	2,028	2.10	2,113	2	2,115	2.13
Total	82,164	14,511	96,675	100.00	84,959	14,799	99,758	100.00

2. Number of Persons Employed, Range of Employment—by Months.

MONTHS.	TOTAL NO. OF PERSONS EMPLOYED.		PERCENTAGES OF—			
			Employment.		Unemployment.	
	1900.	1901.	1900.	1901.	1900.	1901.
January	75,015	76,495	91.50	88.74	8.50	11.26
February	76,144	78,353	92.87	90.90	7.13	9.10
March	77,437	80,463	94.45	93.35	5.55	6.65
April	79,748	83,384	97.27	96.74	2.73	3.26
May	81,354	85,612	99.23	99.32	.77	.68
June	81,987	85,617	100.00	99.33	.....	.67
July	79,976	86,198	97.55	100.00	2.45	.....
August	80,004	85,582	97.58	99.29	2.42	.71
September	80,021	84,276	97.60	97.77	2.40	2.23
October	79,443	84,497	96.90	98.03	3.10	1.97
November	77,973	83,690	95.11	97.09	4.89	2.91
December	74,483	79,131	90.85	91.80	9.15	8.20

3. Other Presentations.

CLASSIFICATION.	1900.	1901.	INCREASE OR DECREASE IN 1901.		
			Amount.	Pct.	
Smallest No. of persons employed	74,483	76,495	+	2,012	2.70
Greatest No. of persons employed	81,987	86,198	+	4,211	5.14
Average No. of persons employed	78,632	82,775	+	4,143	5.27
Average yearly earnings	\$412 00	\$422 00	+	\$10 00	2.43
Av. time in operation, days....	272	276	+	4	1.47
No. of private firms	540	537	—	3	.56
No. of male partners	852	860	+	8	.94
No. of female partners	38	35	—	4	7.89
Total No. of partners	890	895	+	5	.56
No. of corporations	595	598	+	3	.50
No. of male stockholders	13,838	14,338	+	500	3.61
No. of female stockholders	3,118	3,571	+	453	14.53
Total No. of stockholders	16,956	17,909	+	953	5.62
Total No. of partners and stockholders	17,846	18,804	+	958	5.37
Amount of capital invested	\$180,451,482 02	\$195,686,029 05	+	\$15,234,547 03	8.44
Value of goods made or work done	205,068,157 22	219,657,581 22	+	14,589,424 00	7.07
Amount paid as wages	32,378,587 52	34,863,673 56	+	2,485,086 04	7.63
Average capital to each person employed	2,294 89	2,364 07	+	69 18	3.01
Average product to each person employed	2,615 60	2,653 70	+	38 10	1.45

ANALYSIS.

The foregoing tables have been compiled from the reports for 1900 and 1901 from 1,135 identical manufacturing institutions. The facts for the two years were not only received from the same establishments but have been classified upon the same basis and so arranged in the tables that comparisons between them are easily drawn.

The presentations as a whole are really a comparison as between the two years. They show the changes in the different factors that had taken place during the period and thus indicate the condition. An increase in the output and in all or some of the other factors indicates unquestionably a healthy condition. A decrease on the other hand must necessarily mean the contrary. It would at least certainly indicate a temporary depression. This holds good for each industry as well as for all when combined. That every industry should have shown either an increase or a decrease was not to be expected. Even in the best of times there are some among the industries which suffer from adverse conditions. Just as in hard times there are industries which are forging ahead. The real measure of the condition for the state as a whole must therefore be found in the amount of increases or decreases which are shown by the figures for "All Industries" when combined. In order to bring out more clearly the changes that took place in different factors not only for each industry, but for all industries when combined, the facts presented will be subjected to further analysis.

CLASSIFIED WEEKLY EARNINGS.

The first part of the tables as already shown deals with the classified weekly earnings. The wage-earners were namely classified according to the amount earned each week and the number of persons in each class is shown. The basis upon which these classifications were made have been pointed out above and no further explanations are needed. Suffice it to say that the tables

show the number of persons who received under \$5 per week, the number who received \$5 per week but less than \$6, and so on with proper divisions up to the class \$20 and over.

The following table is taken from that for "All Industries" and shows the total number of persons in the 42 industries when combined who received classified weekly earnings in 1900 and 1901.

CLASSIFIED WEEKLY EARNINGS.	1900			1901		
	Male.	Female.	Total.	Male.	Female.	Total.
Under \$5.00	7,074	9,086	16,160	6,906	9,068	15,964
\$5.00 but under \$6.00	2,390	2,745	5,135	2,578	2,783	5,361
6.00 but under 7.00	6,241	1,269	7,510	5,717	1,381	7,098
7.00 but under 8.00	8,925	604	9,529	8,319	653	8,972
8.00 but under 9.00	10,730	316	11,036	10,454	346	10,800
9.00 but under 10.00	16,420	238	16,664	18,031	299	18,330
10.00 but under 12.00	11,675	150	11,825	13,146	181	13,327
12.00 but under 15.00	10,253	88	10,341	10,936	116	11,052
15.00 but under 20.00	6,425	12	6,437	6,759	30	6,789
\$20.00 and over	2,025	3	2,028	2,113	2	2,115
Total	82,164	14,511	96,675	84,969	14,799	99,758

Here is shown not only the total number of persons who received classified weekly earnings, but also the number in each class.

The total number was 96,675 in 1900, and 99,758 in 1901. This is an increase for the latter year of 3,083 persons, or 3.19 per cent. of the total for the former year.

The number of persons as between the classes varied greatly. In some the number was quite large, in others comparatively small. Thus, class \$9 but under \$10 in 1900 included 16,664, while that for \$20 and over included only 2,028 persons. This is the greatest and smallest number for any of the classes and the difference between them leaves room enough for a variety of number in the others. For 1901 the variation was quite as wide, in fact, when the increase in the total number is considered, the proportion of the number in each class was about the same as for 1900.

CLASSIFIED WEEKLY EARNINGS.	1900			1901		
	Male.	Female.	Total.	Male.	Female.	Total.
Under \$5.00	8.61	62.61	16.71	8.13	61.21	16.00
\$5.00 but under \$6.00.....	2.91	18.92	5.81	3.03	18.81	5.37
6.00 but under 7.00.....	7.60	8.75	7.77	6.73	8.99	7.97
7.00 but under 8.00.....	10.86	4.16	9.86	9.79	4.41	8.99
8.00 but under 9.00.....	13.06	2.18	11.42	12.31	2.34	10.83
9.00 but under 10.00.....	19.99	1.64	17.24	21.22	2.02	18.37
10.00 but under 12.00.....	14.21	1.03	12.23	15.47	1.22	13.36
12.00 but under 15.00.....	12.48	.61	10.70	12.87	.79	11.08
15.00 but under 20.00.....	7.82	.08	6.66	7.96	.20	6.81
\$20.00 and over	2.46	.02	2.10	2.49	.01	2.12
Total	100.00	100.00	100.00	100.00	100.00	100.00

In the preceding table is shown the per cent of the number of persons in each class of the total for all. The meaning of this is perhaps best illustrated from the tables. Thus, it has been seen, that in 1900 the male persons included numbered 82,164; and that the male persons in the class under \$5 per week numbered 7,074. In this case the latter constitute 8.61 per cent of the former. It is this relation for each class that is shown in the above table.

It is seen in this table that the class under \$5 included 8.61 per cent. of the male persons employed in 1900, and 8.13 per cent. in 1901. In this case there was thus a slight decrease in the proportion as between the two years. The same class also included 62.61 per cent. of the female persons in 1900 and 61.21 per cent. in 1901. In this case also there was a small decrease. What is thus true for both male and female must be true of the total for both. This is also borne out by the table, for it shows that the proportion of both males and females of the total for both decreased from 16.71 in 1900 to 16.00 per cent. in 1901. In this class there was thus a decrease all around.

A closer study of this table will show that the proportion in the different classes did not vary greatly in the two years. Such variation as may be noticed seems to indicate an upward trend in wages.

Considering the totals for both sexes the greatest proportion of persons is found in the class \$9 but under \$10. This class included 17.24 per cent. of the total in 1900 and 18.37 per cent. in 1901, pointing to a slight increase for the latter year.

second class in order in point of the number it includes is that of under \$5 per week which shows 16.71 per cent. of the total in the former, and 16.00 in the latter year. The third in importance in this respect is that of \$10 but under \$12, while the fourth in order is probably that of \$12 but under \$15, at least this is true for 1901. In examining the figures for the male and female persons separately it is plain that the greatest variations in the proportion as between the classes are found in the columns showing the male persons.

In order that the figures for each year may be still more readily compared they have been reduced to four classes only and in this form are presented as follows:

CLASSIFIED WEEKLY EARNINGS.	1900			1901		
	Male.	Female.	Total.	Male	Female.	Total.
\$9.00 and over.....	56.96	3.38	48.93	60.01	4.24	51.74
7.00 and over.....	80.88	9.72	70.21	82.11	10.99	71.56
6.00 and over.....	88.48	18.47	77.80	88.84	19.98	73.63
Under \$6.00	11.52	81.53	22.12	11.16	79.02	21.37

Even a hasty glance at this table will suffice to show that there was an upward tendency in wages during the period. The class \$9 and over, for instance, includes a larger proportion of both the males and the females in 1901 than in 1900. This is also true of the class \$7 and over and \$6 and over. The class under \$6, on the other hand, shows in every case a smaller proportion in 1901 than in the preceding year. This is evidence enough of the fact that, on the whole, earnings were on the increase. It is true that the increases are not, from all appearances, very large. Still they amount to something and certainly indicate a healthy industrial condition.

CLASSIFIED WEEKLY EARNINGS.	1900			1901		
	Male.	Female.	Total.	Male.	Female.	Total.
Under \$5.00	43.77	56.23	100.00	43.28	56.74	100.00
\$5.00 but under \$6.00	46.54	53.46	100.00	48.09	51.91	100.00
6.00 but under 7.00	83.10	16.90	100.00	81.12	18.88	100.00
7.00 but under 8.00	93.66	6.34	100.00	92.72	7.28	100.00
8.00 but under 9.00	97.14	2.86	100.00	96.79	3.21	100.00
9.00 but under 10.00	98.57	1.43	100.00	98.28	1.74	100.00
10.00 but under 12.00	98.73	1.27	100.00	98.64	1.36	100.00
12.00 but under 15.00	99.15	.85	100.00	98.50	1.50	100.00
15.00 but under 20.00	99.81	.19	100.00	99.56	.46	100.00
20.00 and over	99.85	.15	100.00	99.91	.09	100.00
Total	84.99	15.01	100.00	85.17	14.83	100.00

In this is found the relative proportion of the male and female persons in each wage-class. Thus, out of every 100 persons in the class under \$5, about 44 persons were male and 56 female in 1900, and 43 male and 57 female in 1901. In this class therefore the females outnumber the males. This is also true of the class \$5 but under \$6 as is seen from the fact that and 14,511 were female; and that of the 99,758 persons in 1900, and 48 males and 52 females in 1901. From this point on through all the better paid classes, however, the male greatly outnumbered the female. In fact the tendency in this respect was so strong that in the classes towards the foot of the table where the earnings were high the females constitute only a small fraction of the whole. This is entirely in keeping with facts that are well known to almost everybody.

This table also throws a great deal of light upon the relative proportion of the male and female employes in our manufacturing institutions. In one of the preceding tables it was seen that of the 96,675 persons employed in 1900, 82,164 were male and 14,511 were females; and that of the 99,758 persons in 1901, 84,959 were males and 14,799 females. In this table is found the per cent relation of these numbers. Thus of the whole number who received classified earnings in 1900, 84.99 per cent were male and 15.01 per cent female; while in 1901, 85.17 per cent are in the male column and 14.83 per cent in the female. According to these figures there was a slight decrease in the proportion of women who were employed in fac-

tories. The change in this direction, however, is so small that it cannot be said to point to any given tendency.

CLASSIFIED WEEKLY EARNINGS.	1900			1901		
	Male.	Female.	Total.	Male.	Female.	Total.
Under \$5.00	\$21,222	\$27,258	\$48,480	\$20,718	\$27,174	\$47,892
\$5.00 but under \$6.00	13,145	15,098	28,243	14,179	15,307	29,486
6.00 but under 7.00	40,557	8,249	48,806	37,161	8,652	45,813
7.00 but under 8.00	66,938	4,530	71,468	62,393	4,896	67,291
8.00 but under 9.00	91,205	2,686	93,891	88,859	2,941	91,800
9.00 but under 10.00	156,047	2,261	158,308	171,295	2,841	174,136
10.00 but under 12.00	128,425	1,650	130,075	144,606	1,991	146,597
12.00 but under 15.00	128,163	1,188	129,351	147,636	1,566	149,202
15.00 but under 20.00	112,438	210	112,648	118,283	525	118,808
20.00 and over	45,563	68	45,631	47,543	45	47,588
Total	\$803,703	\$63,198	\$866,901	\$852,673	\$65,940	\$918,613
Per cent.	92.71	7.29	100.00	92.82	7.18	100.00

The preceding table shows the total weekly earnings of all the persons in each class as well as the total of all classes. In this connection it is seen that all the persons included in the class under \$5 per week received \$48,480 per week in 1900 and \$47,892 in 1901. For this class there was thus a decrease in the amount received owing to the fact that there was a decrease in the number of persons for the latter year. The total amount per week for all classes was \$866,901 in the former year and \$918,613 in the latter.

In considering the respective amounts received by total males and total females it develops that in 1900 the share of male persons amounted to 92.71 per cent of the total, and that in 1901 it footed up to 92.82 per cent of the total. The share of the female persons was therefore only 7.29 and 7.18 per cent respectively for the two years. In comparing these figures with the proportion of the number of the females employed in 1900, another example of the inequality of the earnings as between the males and females is furnished. In the presentation showing the per cent of each sex it was shown that the females constituted 15.01 per cent of the total in 1900 and 14.83 per cent in 1901. Taking these facts in connection with those in the above table it is found that while the females constituted about 15 per cent of the total persons employed they received as wages only a little over 7 per cent of the total wages. These facts are important.

Among other things it has thus been shown what the total weekly earnings for all persons in all classes amounted to, and from these facts further deductions may be made. By dividing the total earnings in each case by the number of persons included the weekly amount to each worker is obtained, as the weekly amount is based upon six working days, the average daily rate of wages can be had by dividing weekly earnings by six. The average yearly earnings in turn may be found by multiplying the weekly or daily wages by the time employed, which for all industries, as will be seen later was 272 and 276 days, respectively, for the two years.

The following table shows the average weekly, daily and yearly earnings to each person as based upon the calculations just explained.

CLASSIFIED WEEKLY EARNINGS.	1900			1901		
	Male.	Female.	Total.	Male.	Female.	Total.
Average per week	\$9 78	\$4 36	\$8 97	\$10 13	\$4 46	\$9 21
Average per day	1 62	73	1 49	1 69	74	1 53
Average per year	444 00	199 00	409 00	456 00	204 00	423 00

This table thus shows the estimated weekly, daily, and yearly earnings of the persons included.

Taking the sexes separately it is seen that males received \$9.78 per week, or \$1.62 per day, or \$444 per year in 1900, and \$10.13 per week, or \$1.69 per day, or \$456 per year in 1901; and that the earnings of the females were \$4.36 per week, 73 cents per day, and \$199 per year in the former and \$4.46 per week, 74 cents per day, and \$204 per year in the latter year.

For the total of both sexes the average earnings were \$8.97 per week, \$1.49 per day, and \$409 per year in 1900; and \$9.21 per week, \$1.53 per day and \$423 per year in 1901.

These figures are of course largely based upon estimates, and absolute reliance ought not perhaps be placed upon them. It is believed, however, that they are not misleading, and this position is confirmed by the fact that they practically correspond to the average earnings for all industries as shown in the last table in the series, the one for all industries, as well as elsewhere in this part.

PERSONS EMPLOYED BY MONTHS AND RANGE OF EMPLOYMENT
AND UNEMPLOYMENT.

The second part of the basic tables shows the number of persons employed each month and the range of employment or unemployment. The number employed were reported by the employers, the range of employment etc., has been computed from the figures thus reported.

The following table gives for all industries the number of persons employed each month in 1900 and 1901.

MONTHS.	TOTAL NO. OF PERSONS EM- PLOYED.		PER CENT. OF—			
			Employment.		Unemployment.	
	1900.	1901.	1900.	1901.	1900	1901.
January	75,015	76,495	91.50	88.74	8.50	11.26
February	76,144	78,353	92.87	90.90	7.13	9.10
March	77,437	80,483	94.45	93.35	5.55	6.65
April	79,748	83,384	97.27	96.74	2.73	3.26
May	81,354	85,612	99.23	99.32	.77	.68
June	81,987	85,617	100.00	99.33	.....	.67
July	79,976	86,198	97.55	100.00	2.45	.....
August	80,004	85,582	97.58	99.29	2.42	.71
September	80,021	84,276	97.60	97.77	2.40	2.23
October	79,443	84,497	96.90	98.03	3.10	1.97
November	77,973	83,690	95.11	97.09	4.89	2.91
December	74,483	79,131	90.35	91.80	9.15	8.20
Average	78,632	82,775	95.89	96.03	4.11	3.97

The number employed varies considerably from month to month. This is clearly shown in the above table. In 1900 the greatest number, or 81,987 persons, were employed in June, and the smallest number, or 74,483 persons, in December. In 1901 July shows the greatest number, 86,198 persons, and January the smallest, 76,495 persons. Between the greatest and the smallest there is considerable difference in the number. In fact this difference amounted to 9.15 per cent. in the former, and 11.26 per cent. in the latter year. Between the other months the differences in number are of course smaller than this, but in all cases they are present.

Now, as already explained, it is these differences that are regarded as the range of unemployment. The greatest number for any month is considered as full employment or 100 per cent.

At this time all who could get employment were employed. The number for the other months are looked upon as partial employment, the difference being the range of unemployment. In December, 1900, 9.15 per cent were unemployed, in January 8.50 per cent were unemployed, while in February the range stood at 7.13 per cent. These months show the greatest proportion of unemployed persons. During the remaining months of the same year the range is very narrow which means that the unemployed were few in number. The average range of unemployment for that year, 1900, was 4.11 per cent.

For 1901 also the widest range of unemployment is found in January, February and December. In January the range was 11.26 per cent., in February 9.10 per cent. and in December 8.20 per cent. During the remaining months the range is even narrower than for the same months in 1900. The average number unemployed constituted 3.97 per cent. or a trifle less than for the former year.

OTHER PRESENTATIONS.

Under this the third part of the table is found a variety of facts. Most of these relate to the number of persons employed, yearly earnings, time in operation, private firms and corporations, capital invested, value of the product and total amount paid as wages.

Smallest Number.

Under this head is shown the smallest number of persons employed for all industries during the years 1900 and 1901.

Smallest No. persons, 1901	76,495
Smallest No. persons, 1900	74,483
Increase for 1901	2,012
Per cent. of increase	2.70

These figures as said represent the totals for the 42 industries included. The smallest number of persons in 1901 was 76,495, and for 1900, 74,483. This is an increase for 1901 of 2,012 persons, or 2.70 per cent. It ought perhaps to be ex-

plained that smallest number of persons means the number for the month during which the smallest number were employed.

The smallest number for each industry will be found in the basic tables.

Greatest Number.

The following figures show for all industries the greatest number of persons employed during any month for the two years covered.

Greatest No. in 1901	86,198
Greatest No. in 1900	81,987
Increase for 1901	4,211
Per cent. of increase	5.14

In 1901 the greatest number was 86,198 while in 1900 it was 81,987. The increase during the period thus amounted to 4,211 persons, or 5.14 per cent.

These figures represent the month each year during which the greatest number were employed.

The following is a comparison between the greatest and smallest number of persons in 1900.

1900.

Greatest—June	81,987
Smallest—December	74,483
Difference	7,504
Per cent. of Difference	9.15

From these figures it is seen that the difference between the greatest and smallest number in 1900 amounted to 7,504, or 9.15 per cent. This, as has been explained, was the widest range of unemployment for that year.

In 1901 the difference between the greatest and smallest number employed was as follows.

1901.

Greatest Number—July	86,198
Smallest Number—January	76,495
Difference	9,703
Per cent. of Difference	11.26

For this year the greatest number were employed in June and the smallest in January. The number in the former case exceeds that of the latter by 9,703 persons, or 11.26 per cent. According to these figures there were 9,703 persons employed in June who could not have obtained similar employment in the month of January.

Average Number.

The average number of persons employed is an important figure from several points of view. In the first place it is the best and safest measure of the number that can find employment in any industry. Then again, and mostly because of what has been said, the average number has mostly been the one used in several computations that have been made. For these and other reasons the average number for each of the 42 industries included has been given in both years.

No.	INDUSTRIES.	AVERAGE NO. PER- SONS EMPLOYED IN		INCREASE OR DE- CREASE IN 1901.			
		1900.	1901.	No.	Per cent.		
1	Agricultural implements	2,478	2,639	+	161	+	6.50
2	Artisans' tools	626	569	+	43	+	8.17
3	Beef and pork packing	1,398	1,348	—	50	—	3.58
4	Boots and shoes	2,443	2,584	+	141	+	5.77
5	Boxes—packing	1,003	1,033	+	30	+	2.99
6	Breweries	3,693	4,130	+	437	+	11.83
7	Brick	460	469	+	9	+	2.00
8	Brooms and brushes	209	230	+	21	+	10.05
9	Cement	469	488	+	19	+	4.06
10	Cigars	799	785	—	14	—	1.75
11	Clothing	2,838	3,176	+	338	+	11.91
12	Cooperage	435	409	—	26	—	5.98
13	Cotton and linen goods	443	339	—	104	—	23.48
14	Crackers and confectionery	1,586	1,743	+	157	+	9.90
15	Electric and gas apparatus	1,414	1,697	+	183	+	12.94
16	Flour	779	811	+	32	+	4.11
17	Food preparations	595	483	—	112	—	18.82
18	Furniture	7,408	7,704	+	296	+	4.00
19	Furs	393	482	+	89	+	22.65
20	Iron	3,286	3,709	+	423	+	12.87
21	Knit goods	3,237	3,124	—	113	—	3.49
22	Leather	3,467	3,562	+	95	+	2.74
23	Lumber	11,926	11,463	—	473	—	3.97
24	Machinery	8,061	8,564	+	493	+	6.12
25	Malt	238	261	+	23	+	9.66
26	Paint	76	84	+	8	+	10.53
27	Paper and cigar boxes	632	697	+	65	+	10.28
28	Paper and pulp	3,888	4,468	+	580	+	14.92
29	Saddlery	239	260	+	21	+	8.79
30	Sash, doors and blinds	2,593	2,974	+	381	+	14.69
31	Sheet metal	1,843	2,456	+	613	+	33.26
32	Ship building	879	998	+	119	+	13.54
33	Soap	152	153	+	1	+	.66
34	Staves	262	296	+	34	+	12.98
35	Stone	325	356	+	31	+	9.54
36	Toys	559	563	+	4	+	.72
37	Trunks	848	839	—	9	—	1.06
38	Veneer	521	595	+	74	+	14.20
39	Wagons	2,773	2,933	+	160	+	5.77
40	Woodenware	386	424	+	38	+	9.84
41	Woolen goods	967	965	—	2	—	.21
42	Miscellaneous	2,115	2,042	—	73	—	3.46
	Total average	78,632	82,775	+	4,143	+	5.27

This table thus shows by industries for 1900 and 1901 the average number of persons employed together with the increase or decrease as the case may be for the latter year when compared with the former.

In considering the total for all industries the following facts will appear first.

Average No. employed in 1901 82,775

Average No. employed in 1900 78,632

Increase for 1901 4,143

Per cent. of increase 5.27

During the period of 1900 and 1901 there was thus an increase in the average number of persons employed of 4,143 persons, or 5.27 per cent. as based upon the former year. This increase is somewhat greater than that for both the greatest and smallest number of persons employed and indicates a healthy condition in the industries included.

Taking the industries in detail it is found that 32 showed an increase in the average number employed and 10 a decrease. Those showing a decrease are: beef and pork packing, cigars, cooperage, cotton and linen goods, food preparations, knit goods, lumber, trunks, woolen goods and miscellaneous. As a rule the decreases were not very large, though in cotton goods it amounts to about 23.5 per cent., and in food preparations to 18.8 per cent.

Average Yearly Earnings.

By the average yearly earnings is meant the amount to each worker, or person employed, when the total amount paid as wages during the year is divided equally among the average number of workers.

It is important to know the average amount to each worker, and this for several reasons. While it is true that it may not represent the actual earnings of a single person, it throws more light upon the approximate income of the class as a whole than any other of the presentations included here. When obtained for more than one year these figures also furnish a very good basis of comparing the course of wages from year to year or from one period to another. This is of special value, since classified earnings and almost every other method of presenting the wages paid are cumbersome and offer few opportunities for more definite comparisons. When presented by industries the figures also furnish good evidence of the conditions as to wages in each. It is of course well known that wages are higher in some industries than in others. Some occupations require much greater skill than others, and hence through the operation of the law of supply and demand and other forces have to pay a higher wage. Other occupations again may be dangerous, extremely unpleasant, or require

greater physical strength and for these or other reasons may command a comparatively high wage. Children and women are paid less for their work than adult male persons and where employed this fact is strongly reflected in the average earnings.

The table which follows shows, by industries, for 1900 and 1901, the average yearly earnings together with the increase or decrease in the latter year when compared with the former.

No	INDUSTRIES.	AVERAGE YEARLY EARNINGS IN		INCREASE OR DECREASE IN 1901.	
		1900.	1901.	Amount.	Per cent.
1	Agricultural implements	\$556 00	\$570 00	+ \$14 00	+ 2.52
2	Artisans' tools	426 03	434 15	+ 8 12	+ 1.91
3	Beef and pork packing.....	424 44	435 32	+ 10 88	+ 2.56
4	Boots and shoes	342 06	334 46	- 7 60	- 2.22
5	Boxes (packing)	352 31	349 75	- 2 56	- .73
6	Breweries	508 30	494 13	- 14 17	- 2.79
7	Brick	338 95	359 36	+ 20 41	+ 6.02
8	Brooms and brushes	270 65	281 77	+ 11 12	+ 4.10
9	Cement	394 71	382 35	- 12 36	- 3.13
10	Cigars	370 77	391 12	+ 20 35	+ 5.49
11	Clothing	352 45	316 43	- 36 02	- 10.22
12	Cooperage	428 10	433 52	+ 5 42	+ 1.27
13	Cotton and linen goods	336 28	338 40	+ 2 12	+ .63
14	Crackers and confectionery	220 61	226 67	+ 6 06	+ 2.75
15	Electric and gas apparatus	447 10	417 51	- 29 59	- 6.62
16	Flour	502 02	491 74	- 10 28	- 2.05
17	Food preparations	239 39	249 88	+ 10 49	+ 4.38
18	Furniture	355 61	370 77	+ 15 16	+ 4.26
19	Furs	340 51	293 11	- 47 40	- 13.92
20	Iron	464 14	494 17	+ 30 03	+ 6.47
21	Knit goods	225 84	240 40	+ 14 56	+ 6.45
22	Leather	403 11	430 76	+ 27 65	+ 6.86
23	Lumber	467 76	464 79	- 2 97	- .63
24	Machinery	515 39	560 99	+ 45 60	+ 8.85
25	Malt	557 97	549 18	- 8 79	- 1.58
26	Paint	454 61	472 90	+ 18 29	+ 4.02
27	Paper and cigar boxes	246 27	210 39	- 35 88	- 14.58
28	Paper and pulp	379 42	431 33	+ 51 91	+ 13.68
29	Saddlery	365 85	333 89	- 31 96	- 8.74
30	Sash, doors and blinds	377 99	387 84	+ 9 85	+ 2.61
31	Sheet metal	305 17	305 14	- 3	- .01
32	Ship building	474 62	502 27	+ 27 65	+ 5.83
33	Soap	296 23	301 21	+ 4 98	+ 1.68
34	Staves	331 26	331 63	+ 37	+ .11
35	Stone	560 49	562 64	+ 2 15	+ .38
36	Toys	287 45	290 91	+ 3 46	+ 1.20
37	Trunks	324 24	336 11	+ 11 87	+ 3.66
38	Veneer	326 81	313 60	- 13 21	- 4.07
39	Wagons	443 05	470 38	+ 27 33	+ 6.17
40	Woodenware	355 05	376 28	+ 21 23	+ 5.98
41	Woolen goods	317 60	315 06	- 2 54	- .80
42	Miscellaneous	382 61	416 78	+ 34 17	+ 8.93
	Average all industries	\$412 00	\$422 00	+ \$10 00	+ 2.43

The preceding table shows for each industry included the average yearly earnings in 1900 and 1901.

To begin with it is perhaps proper to call attention to the situation when all industries are included. In the last entry at the foot of the table it is seen that the average yearly earnings to each person for all industries was \$412 in 1900 and \$422 in 1901. A comparison of the figures for the two years thus shows that the earnings in the latter exceeded those of the former by \$10, which is the same as an increase of 2.43 per cent.

In considering each industry by itself many striking features may be noticed. One of the first things to attract attention is differences in the earnings as between the different industries. The reasons for this are many. No attempt will be made to explain them, though in most cases they are quite plain. Another feature to attract attention is the increase and decrease as between the two years. With these our concern is greater and for this reason a few of the leading facts will be pointed out.

In looking over the table it will be noticed that 15 industries show a decrease in the earnings in 1901, and that 27 show an increase for that year. These changes varied greatly in both cases. In some instances they amounted to quite a sum, in others they were merely nominal.

Of the decreases, one, that for furs amounted to about \$47 for the year. Four other changes, those for electric goods, boxes, saddlery, and clothing ranged from about \$30 to about \$36 for the year. The remaining decreases were quite low, amounting to only a few dollars each.

Of the increases the highest of about \$52, was that for paper and pulp. The next in order with about \$46 is machinery. Ship building shows an increase of about \$34 and seven others have increases ranging from about \$20 to about \$30. For the remaining seventeen industries the increase varies from a nominal sum only to about \$20.

As to the causes of these changes the returns did not offer much in the way of explanation. In some cases they occurred through the increase in the proportion of the cheaper or lower

priced labor and other changes of this nature. In other instances again other forces were at work with the net result that wages suffered. In few, if any cases were the decreases due to any direct reduction in the rate.

Time in Operation.

Each establishment reporting gave the number of days it had been in operation during the year. From these facts the average days in operation by each industry and by all industries were computed.

In judging of industrial conditions facts of this kind are of the greatest importance. They show among other things what proportion of the time they were doing business and how long they were idle. That such facts alone will shed a great deal of light upon the business situation goes without saying. For no one would say that the business was brisk if the amount of it on hand could be disposed of in one-half or even two-thirds of the time. On the other hand few complain of dull times when they have as much to do as they can attend to when they devote all their time to it. They are also useful in comparing conditions from year to year. The year which shows the most time in operation is usually regarded as the best from a business point of view. For not only is it likely that more goods have been turned out but that larger sums have been paid as wages. And these facts are after all the real measure of industrial conditions.

The following table relates to the time in operation. It shows the average number of business days for each industry as well as for all industries. It also shows the changes in 1901 as compared with the preceding year expressed both in number and per cent.

No.	INDUSTRIES.	AVERAGE TIME IN OPERATION IN		INCREASE OR DECREASE IN 1901	
		1900.	1901.	Number.	Per cent.
1	Agricultural implements	271.00	272.00	+ 1.00	+ .37
2	Artisans' tools	280.93	300.47	+ 19.54	+ 6.96
3	Beef and pork packing	288.00	284.00	- 4.00	- 1.39
4	Boots and shoes	281.00	280.00	- 1.00	- .36
5	Boxes (packing)	262.00	279.00	+ 17.00	+ 6.49
6	Breweries	312.00	315.00	+ 3.00	+ .96
7	Brick	151.31	147.44	- 3.87	- 2.56
8	Brooms and brushes	260.00	269.00	+ 29.00	+ 11.15
9	Cement	252.00	252.00	-	-
10	Cigars	286.80	286.18	- .62	- .22
11	Clothing	284.69	280.41	- 4.28	- 1.50
12	Cooperage	249.24	257.36	+ 11.89	+ 4.77
13	Cotton and linen goods	290.50	250.17	- 40.33	- 13.88
14	Crackers and confectionery	300.63	299.44	- 1.19	- .40
15	Electric and gas apparatus	297.17	299.21	+ 2.04	+ .69
16	Flour	260.86	260.54	- .32	- .12
17	Food preparations	109.00	97.00	- 12	- 11.01
18	Furniture	283.93	292.54	+ 8.61	+ 3.03
19	Furs	256.50	259.00	+ 32.50	+ 12.67
20	Iron	274.36	294.24	+ 19.88	+ 7.26
21	Knit goods	288.61	288.44	- .17	- .06
22	Leather	306.33	304.06	- 1.27	- .42
23	Lumber	233.00	233.00	-	-
24	Machinery	297.00	299.00	+ 2.00	+ .67
25	Malt	318.00	311.14	- 6.86	- 2.15
26	Paint	242.71	253.86	+ 11.15	+ 4.59
27	Paper and cigar boxes	288.18	296.82	+ 8.64	+ 3.00
28	Paper and pulp	293.32	300.42	+ 7.10	+ 2.42
29	Saddlery	302.00	240.00	- 62.00	- 20.53
30	Sash, doors and blinds	272.00	285.00	+ 13.00	+ 4.78
31	Sheet metal	303.33	302.81	- .52	- .17
32	Ship building	292.14	252.43	- 39.71	- 13.59
33	Soap	298.00	295.14	- 2.86	- .96
34	Staves	221.33	225.67	+ 4.34	+ 1.96
35	Stone	261.13	263.47	+ 2.34	+ .90
36	Toys	279.50	278.50	- 1.00	- .36
37	Trunks	224.00	298.00	+ 74.00	+ 33.04
38	Veneer	266.89	286.44	+ 19.55	+ 7.33
39	Wagons	285.40	291.04	+ 5.64	+ 1.98
40	Woodenware	248.33	239.22	- 9.11	- 3.67
41	Woolen goods	276.06	276.12	+ .06	+ .02
42	Miscellaneous	250.00	243.60	- 7.00	- 2.80
Average for all industries		272.00	276.00	+ 4.00	+ 1.47

For all industries this table shows that the average time of operation was 272 days in 1900 and 276 days in 1901. This is an increase of 4 days, or one and one-half per cent. for the latter year.

Considering the industries in detail it is found that 20 show a decrease in days in operation; that 20 show an increase in this respect and that 2 show no change. On the whole, however, the increases amounted to more than the decreases, as is

plain from the fact that on the whole there was a gain during the period.

Idleness on the part of a manufacturing plant is not always caused by lack of orders or business. There are many other causes in operation many of which have absolutely no relation to the amount of business on hand. Thus there is not a plant in existence that is not compelled to shut down for repairs about so often. In fact the greater the volume of business, or the pressure under which it is run, the oftener repairs are apt to become necessary. Then again there may be a shortage in material or help. Things counted on may have miscarried. Shipments may have been delayed. Accidents may have occurred. In short the operating time may be effected in many different ways.

Private Firms and Corporations.

The establishments reporting also disclosed whether they were operating under private or corporate management. The respective number in each case is shown in the basic tables. The changes between the two years are as follows:

Number of private firms in 1900	540
Number of private firms in 1901	537
Decrease in 1901	3
Per cent. of decrease	56

In comparing these figures we find that the private firms decreased in number during the period. The change in this respect was not very large amounting only to 3 firms, but it is probably big enough to illustrate the tendency.

The number of corporations for the two years was as follows.

Number of corporations in 1901	598
Number of corporation in 1900	595
Increase for 1901	3
Per cent. of increase .....	.50

The corporations increased from 595 in 1900 to 598 in 1901. This increase thus corresponds to the decrease in the private firms. As time goes on there is a gradual change from the old

style of private or partnership management to corporate control. These figures thus seem to be in full harmony with the general tendency in the industrial world.

Partners and Stockholders.

The respective number of partners and stockholders for the two years were also reported. The number of partners stood as follows:

	Male.	Female.	Total.
Number of partners in 1900	852	38	890
Number of partners in 1901	860	35	895
Changes	+ 8	- 3	5

In the 540 establishments under private firm management in 1901 there were 890 partners, or about 1.65 partners on the average to each establishment.

In 1901 for the 537 private firms there were 895 partners, or an average of 1.66 to each.

The male partners numbered 852 in 1900 and 860 in 1901, showing an increase of 8.

The female partners numbered 38 in 1900 and 35 in 1901, a decrease of 3 partners.

The total number of partners numbered 890 in the former and 895 in the latter year showing an increase of 5.

While there was a decrease of 3 in the number of the private firms there was an increase of 5 in the number of the partners.

Facts of this nature are important because they throw much light upon the tendencies in the form of the management and the number of those who are interested as proprietors.

The respective number of male, female, and total stockholders stood as follows:

	Male.	Female.	Total.
Number of stockholders, 1901	14,338	3,571	17,909
Number of stockholders, 1900	13,838	3,118	16,956
Changes (increase)	500	453	953

In 1901 there were 17,909 stockholders, of whom 80 per cent. were male and about 20 per cent. were female.

In 1900 the stockholders numbered 16,956. Of these about 81.60 per cent. were male, and 18.40 per cent. female.

The average number of the stockholders was 28.5 to each of the 595 corporations in 1900, and 29.9 to each of the 598 corporations in 1901.

In comparing the male stockholders it is found that they increased from 13,838 in 1900 to 14,338 in 1901. This increase amounts to 500 persons.

For the female the increase is 453 or from 3,118 in the former to 3,571 in the latter year.

The relative proportion of males and females who are interested as owners seems to differ greatly under the two forms of management. Thus we find that the female stockholders constituted about 20 per cent. of the whole number in 1901, as against only 4.27 per cent. for the female partners. In 1900 the relation is 18.40 per cent. for the female stockholders and 4.28 per cent. for the partners. The reasons for this variation could only be made clear through a complete analysis of the relative merits, from an investment point of view, of undertakings under private and corporate management.

Capital Invested.

Capital is the third factor in production. It is one of the most important elements in all productive undertakings. It seems to rank with labor and land. It makes both more productive. In the industrial world it has grown to such an importance that the amount used in any industry must be known before any intelligent opinion as to the condition can be rendered.

By capital here is meant all concrete objects that have been made to assist in production. Thus it includes the respective amounts invested in land, buildings, machinery, tools and other equipment. It also includes the amount of cash capital employed whether on hand or invested in materials, stocks, and sundries.

The following table shows, by industries, the amount of capital invested in 1900 and 1901, together with changes for the latter year.

No	INDUSTRIES.	AMOUNT OF CAPITAL INVESTED IN		INCREASE OR DE- CREASE IN		
		1900.	1901.	Number.	Per ct.	
1	Agricultural implements.	\$13,264,139 07	\$13,641,159 70	+	\$377,020 63	+ 2.84
2	Artisans' tools	546,699 88	680,170 74	+	134,470 86	+ 24.64
3	Beef and pork packing...	2,741,940 67	2,849,380 49	+	107,439 83	+ 3.91
4	Boots and shoes	2,301,379 52	2,437,245 33	+	135,865 81	+ 5.90
5	Boxes (packing)	1,152,520 60	1,158,403 39	+	5,882 79	+ .51
6	Breweries	40,345,373 93	41,870,505 46	+	1,525,131 53	+ 3.78
7	Brick	531,795 54	576,017 07	+	44,221 53	+ 8.32
8	Brooms and brushes	161,457 86	176,034 70	+	14,576 84	+ 9.03
9	Cement	1,188,379 10	1,349,551 94	+	161,172 84	+ 13.56
10	Cigars	458,748 78	567,811 18	+	109,062 40	+ 23.77
11	Clothing	2,447,870 86	2,467,475 53	+	19,604 67	+ .80
12	Cooperage	486,639 80	614,356 75	+	127,716 95	+ 26.24
13	Cotton and linen goods ..	752,900 52	762,347 65	+	9,447 13	+ 1.25
14	Crackers and confection- ery	1,410,485 77	1,496,423 35	+	85,937 58	+ 6.09
15	Electric and gas appa- ratus	3,705,520 73	3,807,680 23	+	102,139 50	+ 2.76
16	Flour	6,051,249 79	6,349,277 45	+	298,027 66	+ 4.93
17	Food preparations	776,009 22	847,942 46	+	71,933 24	+ 9.27
18	Furniture	7,840,244 63	8,335,268 73	+	495,024 10	+ 6.31
19	Furs	310,978 96	374,978 98	+	64,000 02	+ 20.58
20	Iron	4,406,889 73	6,707,241 57	+	2,300,351 84	+ 54.47
21	Knit goods	2,219,489 46	2,094,706 19	-	124,783 27	- 5.62
22	Leather	9,389,691 12	9,051,276 35	-	338,414 77	- 3.60
23	Lumber	32,909,554 01	28,658,572 44	-	4,250,981 57	- 12.92
24	Machinery	14,376,566 39	15,692,383 97	+	1,315,817 58	+ 9.15
25	Malt	2,622,513 35	2,900,850 74	+	277,337 39	+ 10.57
26	Paint	582,728 52	550,561 79	-	32,166 73	- 5.52
27	Paper and cigar boxes...	677,518 41	645,679 19	-	31,839 22	- 4.70
28	Paper and pulp	11,949,831 62	13,464,026 02	+	1,514,194 40	+ 12.67
29	Saddlery	179,800 36	233,971 37	+	54,171 01	+ 30.13
30	Sash, doors and blinds...	3,277,069 44	3,941,628 08	+	664,558 64	+ 20.28
31	Sheet metal	2,710,795 65	2,980,575 92	+	269,810 27	+ 9.95
32	Ship building	1,158,444 32	1,194,280 74	+	35,836 42	+ 3.09
33	Soap	317,944 52	346,766 62	+	28,822 10	+ 9.06
34	Staves	183,802 65	201,796 68	+	17,994 03	+ 9.79
35	Stone	597,872 71	651,229 24	+	53,356 51	+ 8.92
36	Toys	573,561 78	633,242 00	+	59,680 22	+ 10.41
37	Trunks	1,102,663 18	1,247,250 00	+	144,586 82	+ 13.11
38	Veneer	601,961 80	775,033 20	+	173,071 40	+ 28.75
39	Wagons	5,862,445 56	6,803,652 78	+	941,207 22	+ 16.05
40	Woodenware	428,483 00	556,229 98	+	127,746 98	+ 29.82
41	Woolen goods	1,491,281 94	1,720,938 51	+	229,656 57	+ 15.40
42	Miscellaneous	4,056,277 27	4,272,134 54	+	215,857 27	+ 5.32
Total all industries..		\$180,451,482 02	\$195,686,029 05	+	\$15,234,547 03	+ 8.44

Here we find the investment for 1900 and 1901. It is given by industries and the table also shows the increase and decrease as the case may be for the latter year when compared with 1900.

The total capital for all industries was \$180,451,482.02 in 1900 and \$195,686,029.05 in 1901. Between the two years there was thus an increase in the amount of capital used of \$15,234,547.03 or of 8.44 per cent.

In taking each industry separately it is seen that 37 showed an increase in the amount of capital employed and that 5 showed a decrease. Those showing a decrease were knit goods, leather, lumber, paint, paper and cigar boxes. These decreases are not large. Especially is this so when the whole investment is considered. The largest decrease was for lumber amounting to \$4,250,981.57 or to 12.92 per cent. of the investment for 1900. In the other cases it ranges from about three and one-half per cent. to about five and one-half. The lumber industry in this state is on the decline and hence the decrease is expected. In the other four industries, however, the falling off was, as far as could be determined, only due to some temporary cause.

The figures in this table are certainly gratifying. They go far toward showing the healthy condition of our manufacturing industries.

Value of the Goods Made or Work Done.

Each one of the 1,135 establishments included reported in full as to the value of their product for the years in question. The facts thus obtained are important. For certain purposes, those for instance, of showing the business condition in our manufacturing industries they are perhaps the most valuable of any that are presented. Without going into details it can perhaps be said that an increase in the output indicates growth. It shows that business is on the increase, and this in turn usually means that conditions are prosperous. A decrease on the other hand, particularly when observed for more than one year, is apt, in fact almost certain to indicate directly the opposite conditions from those that exist when an increase is shown.

In the table which follows is shown for each one of the in-

dustries included and for all of them when combined, the value of the product for 1900 and 1901.

No.	INDUSTRIES.	VALUE OF GOODS MADE OR WORK DONE IN		INCREASE OR DE- CREASE IN 1901.	
		1900.	1901.	Number.	Per ct.
1	Agricultural implements..	\$7,606,108 15	\$7,613,868 24	+	\$7,760 09 + .11
2	Artisans' tools	654,689 88	753,200 26	+	98,510 38 + 15.05
3	Beef and pork packing...	15,247,159 65	16,189,283 05	+	942,123 40 + 6.18
4	Boots and shoes	4,302,105 48	4,629,859 96	+	327,754 48 + 8.08
5	Boxes (packing)	1,521,277 76	1,744,780 57	+	223,502 81 + 14.69
6	Breweries	\$3,086,905 21	23,447,987 24	+	351,082 03 + 1.52
7	Brick	444,690 50	428,496 14	-	18,194 36 - 4.09
8	Brooms and brushes	234,141 25	272,295 89	+	38,154 64 + 16.30
9	Cement	1,354,977 68	1,542,812 47	+	187,834 79 + 13.88
10	Cigars	1,071,888 37	1,067,085 18	-	4,803 19 - .45
11	Clothing	5,569,254 74	5,814,488 23	+	245,233 49 + 4.40
12	Cooperage	718,788 43	729,431 29	+	10,642 96 + 1.48
13	Cotton and linen	682,495 77	466,896 53	-	215,599 24 - 31.59
14	Crackers and confection- ery	2,914,118 43	3,644,025 13	+	729,906 70 + 25.05
15	Electric and gas appa- ratus	3,222,283 59	3,922,029 47	+	699,745 88 + 21.72
16	Flour	13,979,590 75	14,235,613 38	+	256,022 63 + 1.83
17	Food preparations	1,366,120 74	1,130,745 12	-	235,375 62 - 17.23
18	Furniture	9,009,185 85	9,246,101 43	+	236,915.58 + 2.63
19	Furs	743,616 37	847,620 54	+	104,004 17 + 13.99
20	Iron	8,630,831 48	10,288,592 30	+	1,657,760 82 + 19.15
21	Knit goods	3,750,731 92	3,612,680 69	-	138,051 23 - 3.70
22	Leather	13,155,027 59	13,769,956 83	+	614,929 24 + 4.67
23	Lumber	28,145,945 97	27,135,703 84	-	1,010,242 13 - 3.60
24	Machinery	16,508,303 44	18,206,285 88	+	1,697,982 44 + 10.29
25	Malt	2,913,696 66	3,146,856 33	+	233,159 67 + 8.00
26	Paint	482,492 75	439,052 93	-	43,439 82 - 9.00
27	Paper and cigar boxes...	975,695 24	876,620 97	-	109,074 27 - 11.66
28	Paper and pulp	10,090,344 24	12,699,395 07	+	2,609,050 83 + 25.86
29	Saddlery	466,838 59	502,775 95	+	35,937 36 + 7.70
30	Sash	5,068,839 02	5,875,235 45	+	806,396 43 + 15.91
31	Sheet metal	3,058,643 66	4,081,174 05	+	1,022,530 39 + 33.43
32	Ship building	1,227,269 40	1,313,326 79	+	86,057 39 + 7.01
33	Soap	695,260 56	721,885 86	+	26,625 30 + 3.83
34	Staves	300,319 53	335,927 04	+	35,607 51 + 11.86
35	Stone	525,111 50	691,397 79	+	166,286 29 + 31.67
36	Toys	542,824 57	560,491 59	+	17,667 02 + 3.25
37	Trunks	1,459,747 34	1,491,000 00	+	31,252 66 + 2.14
38	Veneer	632,259 91	652,426 73	+	20,176 82 + 3.19
39	Wagons	5,629,297 81	6,375,568 04	+	746,268 23 + 13.26
40	Woodenware	402,500 00	474,958 08	+	72,458 08 + 18.00
41	Woolen goods	1,848,707 69	1,693,711 83	-	154,995 86 - 8.38
42	Miscellaneous	6,858,029 75	7,042,928 96	+	184,899 21 + 2.70
Total all Industries..		\$205,068,157 22	\$219,657,581 22	+	\$14,589,424 00 + 7.07

This table should be studied in detail. It gives not only the value of the business for each year, but these facts have been compared, and the results of these comparisons are so presented as to show the increases and decreases in the latter year.

In going over the table and examining each industry by itself

it is found that most of them show the largest product in 1901. In fact the increase in most cases is quite marked.

The figures which represent all the industries included show the total output was valued at \$205,068,157.22 in 1900 and \$219,657,581.22 in 1901. In the latter year over the former there was thus an increase of \$14,589,424, or 7.07 per cent. This is a change that in most cases corresponds quite closely to that for the other elements.

Of the 42 industries 33 thus show a greater business in the latter year while for 9 there was a falling off in the output. Those showing a decrease are: Brick, cigars, cotton and linen goods, food preparations, knit goods, lumber, paint, paper, etc., boxes, and woolen goods. The change is greatest in lumber. This was of course to be expected in view of the situation of this industry in this state. Next in order from this point of view are food preparations and cotton goods. Then comes woolen goods and paper boxes. The remaining decreases are small.

Considering the per cent. of the decrease, cotton goods come first and food preparations second, with a respective change of 31.59 and 17.23 per cent. Paint 9 per cent. and woolens 8.38 per cent., while lumber with the largest actual decrease only show 3.60 when it comes to be figured out in per cent.

The largest actual increases are in sheet metal goods, iron, paper and pulp, wagons, machinery. In many of these the changes are not only large when the actual amount is considered but they are so relatively.

On the whole the figures in this table indicate beyond a doubt a healthy and substantial growth in our manufacturing industries.

Total Amount Paid as Wages.

The following table shows for each industry in 1900 and 1901 the total amount paid as wages together with increase or decrease in 1901 when compared with the former year.

By the total wages in this case is meant the entire amount paid as wages for the labor employed in obtaining the product for the year.

This table, like the ones for capital, product, etc., is merely a summary of the basic tables. That is the figures, etc., presenting the total wages here are the same as those given in the basic tables.

No	INDUSTRIES.	AMOUNT PAID AS WAGES IN		INCREASE OR DECREASE IN 1901.	
		1900.	1901	Number.	Per ct.
1	Agricultural implements..	\$1,551,223 41	\$1,504,974 33	-	\$46,249 08 - 2.98
2	Artisans' tools	224,093 72	247,032 57	+	22,938 85 + 10.24
3	Beef and pork packing ..	593,380 59	586,809 29	-	6,551,30 - 1.10
4	Boots and shoes	856,653 76	884,240 24	+	28,586 47 + 3.42
5	Boxes (packing)	353,363 88	361,289 32	+	7,925 44 + 2.24
6	Breweries	1,877,164 35	2,040,750 85	+	163,586 50 + 8.71
7	Brick	152,527 81	164,946 74	+	12,418 93 + 8.14
8	Brooms and brushes	56,566 50	64,807 57	+	8,241 07 + 14.57
9	Cement	185,157 15	186,584 53	+	1,427 38 + 0.77
10	Cigars	296,242 05	307,026 18	+	10,784 13 + 3.64
11	Clothing	1,000,250 28	1,004,986 93	+	4,736 65 + 0.47
12	Cooperage	186,225 08	177,307 60	-	8,917 43 - 4.79
13	Cotton and linen goods..	148,969 95	114,718 55	-	34,251 40 - 22.99
14	Crackers and confection- ery	349,896 76	395,085 85	+	45,189 09 + 12.91
15	Electric and gas appa- ratus	632,205 56	666,764 52	+	34,558 96 + 5.47
16	Flour	391,074 70	398,804 36	+	7,729 66 + 1.97
17	Food preparations	142,439 34	120,693 94	-	21,745 40 - 15.27
18	Furniture	2,634,365 92	2,856,404 53	+	222,038 61 + 8.43
19	Furs	133,821 91	141,279 12	+	7,457 21 + 5.57
20	Iron	1,526,151 98	1,832,888 45	+	307,736 47 + 20.18
21	Knit goods	731,030 64	751,616 34	+	19,985 70 + 2.73
22	Leather	1,397,593 34	1,534,366 18	+	136,772 84 + 9.78
23	Lumber	5,678,466 07	5,323,282 82	-	255,173 25 - 4.57
24	Machinery	4,154,533 26	4,798,701 68	+	644,168 42 + 15.51
25	Malt	132,796 43	143,337 11	+	10,540 68 + 7.94
26	Paint	34,550 15	39,723 00	+	5,172 85 + 14.97
27	Paper and cigar boxes..	155,643 78	146,640 75	-	9,003 03 - 5.78
28	Paper and pulp	1,475,193 46	1,927,165 49	+	451,972 03 + 30.64
29	Saddlery	87,438 79	86,813 65	-	625 14 - 0.71
30	Sash	980,120 94	1,153,425 73	+	173,305 79 + 17.68
31	Sheet metal	562,429 95	749,418 36	+	186,988 41 + 33.25
32	Ship building	417,187 25	501,260 67	+	84,073 42 + 20.16
33	Soap	45,026 33	46,085 69	+	1,059 36 + 2.35
34	Staves	86,790 18	98,162 12	+	11,371 94 + 13.10
35	Stone	182,157 80	200,298 30	+	18,140 50 + 9.96
36	Toys	160,686 45	163,782 46	+	3,096 01 + 1.93
37	Trunks	274,956 05	281,993 00	+	7,036 95 + 2.56
38	Veneer	170,267 50	186,534 28	+	16,266 78 + 9.55
39	Wagons	1,228,578 70	1,379,627 16	+	151,048 46 + 12.29
40	Woodenware	137,050 00	159,544 46	+	22,494 46 + 16.41
41	Woolen goods	307,116 65	304,037 46	-	3,079 19 - 1.00
42	Miscellaneous	809,229 10	851,060 34	+	41,831 24 + 5.17
	Total all industries..	\$32,378,587 52	\$34,863,673 56	+	\$2,485,086 04 + 7.68

The total amount paid as wages by all industries was \$32,378,587.52 in 1900, and \$34,863,673.56 in 1901. Between the two years there was according to this an increase of

\$2,485,086.04, or of 7.68 per cent. These facts are shown in the above table, and may be taken as representing the situation for the state.

While thus there was an increase in the amount paid when all industries are included; it is a fact that this increase was shared by each industry. This is plainly pointed out in the table. It is seen there that of the 42 industries included 33 show an increase and 9 show a decrease. That the former exceed the latter in amount as well as in number is evident from the figures for all industries.

The general tendency in wages as well as in other respects was thus upward. The industries which showed a deviation from the general tendency were: Agricultural implements, packing, cooperage, cotton goods, food preparations, lumber, paper boxes, saddlery, and woollens. The changes in these respects, with possibly one exception that of beef, etc., packing, seems to be in harmony with the changes in most of the other factors.

The increases were greatest in machinery, and paper and pulp. This of course applies to the amount of increase only when it comes to the per cent. Sheet metal goods had the lead with paper and pulp a close second. Iron, ship building and several other industries also show heavy increases.

SUMMARIES.

From the facts thus brought out in the foregoing analysis the following summaries may be made.

Classified Weekly Earnings.

The presentations under this head show clearly the situation with respect to wages. For 1900 they included 96,675 persons of whom 82,164, or 84.99 per cent were male, and 14,511, or 15.01 per cent, were female. For 1901, 99,758 persons are included, of whom 84,959, or 85.17 per cent. were male, and 14,799, or 14.83 per cent., female. For comparative purposes except as between the classes the presentations are somewhat unwieldy, and for this reason it is rather difficult to ascertain the exact increase in 1901 over 1900. That there was a substantial

increase for 1901 is plain. Of this the tables furnish an abundance of evidence. One illustration may be in point. In 1900, 56.96 per cent. of the male, 3.38 per cent. of all the female, and 48.93 per cent. of the total of both received \$9 or over per week. In 1901 this amount was received by 60.01 per cent. of the male, 4.24 per cent. of the female and 51.74 of the total of both sexes. Another point may help to show the increase. Thus in 1900 the average weekly earnings to each person was \$9.78 for the male, \$4.36 for the female, and 8.97 for both; while for 1901 the amount was: male 10.13, female \$4.46, total both male and female \$9.21. These figures have been computed upon precisely the same basis and are believed to represent the situation.

Persons Employed.

The presentations relating to the number of persons employed each month and to the range of employment disclosed some interesting facts. For both years the largest number for any month are found during the summer season, and the smallest number in the winter. In 1900, for instance, June shows 81,987 persons and December 74,483. In 1901, July shows 86,198 persons and January 76,495. In both cases these are the highest and lowest months. The range between the highest and lowest was 7,504, or 9.15 per cent. in 1900, and 9,122, or 11.26 per cent. in 1901. With the highest month each year representing full employment, it necessarily follows that for each of the other months a certain per cent. were unemployed. For one month the proportion of the unemployed was greater in 1901 than in 1900, but for the other months the range was a trifle narrower, making the average number unemployed 4.11 per cent. in 1900 and 3.97 per cent. in the latter year. As a whole the figures indicate that not only were more persons employed in 1901, but that, with the exception of one or two months, the fluctuations were less, or employment slightly more steady.

Smallest, Greatest, Average Number Persons.

The smallest number of persons employed during any month was 74,483 in 1900 and 76,495 in 1901, an increase for the latter year of 2,012, or 2.70 per cent. The greatest number was

81,987 in 1900, and 86,198 in 1901. Here the increase is 4,211 persons or 5.14 per cent.

The average number of persons was 78,632 in 1900, and 82,775 in 1901, an increase of 4,143, or 5.27 per cent. In the latter year there was thus a substantial increase in the number employed. Taking each industry by itself it was found that 32 showed an increase in the average number employed and that 9 gave a decrease. The largest increases were noticed for sheet metal goods, paper and pulp, machinery, breweries, iron, sash-doors and blinds, clothing and furniture. In each of these industries were employed on the average from 300 to 600 more persons in the latter year than in the former. The largest decrease was in lumber where it amounted to 473 persons. Knit goods had 113 persons less, food preparations 112, and cotton goods 104 persons less than in 1900. The decreases, however, do not foot up to nearly as many persons as the increases.

Average Yearly Earnings.

The average yearly earnings for all persons regardless of sex and age was \$412 in 1900 and \$422 in 1901. There was thus an increase for the latter year of \$10. These figures represent all industries. In taking up each industry separately many variations were found. In some the earnings were a great deal higher, in others lower. Some showed an increase in earnings for 1901 others again a decrease. Among the industries in which the earnings were the highest are: Agricultural implements, breweries, flour, iron, machinery, malt, ship building, and stone cutting. There are several others in which the earnings are comparatively high, but those enumerated are in the lead. Among the industries with the lowest earnings are found: Brooms, crackers, etc., food preparations, furs, knit goods, paper boxes, toys, etc. In all of these the earnings were below \$300 per year. In all 27 out of the 42 industries showed an increase in earnings, while 15 showed a decrease. But as seen, the net result of these changes was an increase in the earnings when all are included.

AVERAGE NUMBER OF DAYS IN OPERATION.

As a whole the establishments included were in operation more days in 1901 than in 1900. This is seen from the fact that the average days in operation was 276 in the former year and 276 in the latter, or an increase of four days for 1901. Not all of the industries shared in this increase for of those included, 20 showed a decrease and 2 no change. The industries showing the greatest increase were: Artisans' tools, boxes, brooms, etc., furs, iron, trunks and veneer. The largest decreases were in cotton, saddlery, and ship building.

Private Firms, Corporations.

There is a slow but constant change from year to year in the mode of management of our manufacturing plants. The old style of doing business seems to be gradually fading away. The corporation with public ownership is replacing the private firm or the old partnership. Of the 1,135 establishments included, 540 were private firms and 595 corporations in 1900, while in 1901 the private firms had decreased to 537, and the corporations increased to 598. During the period therefore three establishments changed from private firms to the corporate mode of management. The average amount of capital invested to each establishment was about \$159,000 in 1900 and \$171,500 in 1901. The average number of persons employed to each establishment was about 69 and 73 respectively for the two years; and the average value of the product was about \$180,000 for the former and \$193,530 for the latter year.

Partners and Stockholders.

In 1900, the 540 firms had 852 male and 38 female, or a total of 890 partners. In 1901 the 537 firms had 860 male, 35 female, or a total of 895 partners. For the latter year there was thus an increase of 8 in the number of male partners and a decrease of 3 in the female. The average number of partners to each firm was 1.65 in the former year and 1.67 in the latter.

The corporations increased in number from 595 in 1900 to 598 in 1901. The male stockholders increased from 13,838 to 14,338, or 500 persons. The females increased from 3,118 to 3,571, or 453 persons. The average number of stockholders to each increased from 28.5 to 29.9 persons.

Capital Invested.

During the period there was an increase of \$15,234,547, or 8.44 per cent., in the capital invested. In other words the total amount changed from \$180,451,482, to \$195,686,029. Of the industries included 37 show an increase of the amount invested for the latter year as compared with the former, and 5 a decrease. The greatest actual increases were shown for breweries, iron, machinery, paper and pulp and wagons, etc. The greatest decrease was that for lumber.

Value of Goods Made or Work Done.

The products of all the industries increased from \$205,068,157 in 1900 to \$219,657,581 in 1901. The increase thus amounted to \$14,589,424, or 7.07 per cent. Every industry, however, did not show an increase. Of the 42 which are included, 9 gave a decrease. The greatest increase is that for paper and pulp, while lumber shows the greatest decrease. The changes in the value of the output seem on the whole in full harmony with those that took place in most of the other elements of production.

Total Amount Paid as Wages.

In obtaining their product all the establishments included paid in wages \$32,378,587 in 1900 and \$34,863,673 in 1901. The change thus amounts to \$2,485,068, or 7.68 per cent. Thirty-three industries show an increase in the amount of wages paid and nine a decrease. The greatest increases were those for machinery, paper and pulp, iron, and furniture. The greatest decrease on the other hand was in lumber.

Stock or Raw Material.

The value of the materials and supplies consumed or used up in production was \$103,600,000, or about 50.5 per cent of the total value of the product in 1900, and \$110,568,000, or about 50.3 per cent. of the value of the product in 1901. For the latter year there was thus an increase in the value of the material used amounting to \$6,986,564, or 6.75 per cent. The facts as to the cost of materials were not included in the tables. The data, however, were obtained and the totals were given here.

EMPLOYMENT AND EARNINGS FOR 12 INDUSTRIES IN 1899 AND 1900.

Under this head in this part are included a compilation of the reports from 383 establishments for 1899 and 1900. These reports have been classified into 12 industries, and the basic facts will be found in five tables which may be described as follows:

Table I shows by industries, for each of the two years covered, the classified weekly earnings for the week when the greatest number of persons were employed. The males and females have been classified separately as well as together, and the tables as they stand give the number of persons in each wage class. The per cent. of the total number in each class of the total number included are also given.

Table II shows by industries for the two years, the number of persons employed each month. It also shows the range of employment and unemployment, as computed from the number thus employed. In these computations the number for the month during which the greatest number were employed is regarded as full employment.

In table III is shown the total yearly earnings, or the amount paid as wages in 1899 and 1900 for each one of the 12 industries included, together with the increase or decrease, as the case may be in 1900, when compared with 1899.

In table IV is given for each industry the average yearly earnings to each person employed. The average earnings were obtained by dividing the total amounts paid as wages with the average number of persons employed.

Table V gives by industries the average number of days in operation. It also shows the changes for 1900 when compared with the preceding year.

As will be noticed the tables that follow are, in form, precisely like those employed for the presentation of similar facts for other industries in this report.

CLASSIFIED WEEKLY EARNINGS IN 1899-1900-12 INDUSTRIES.

Table I.

CLASSIFIED WAGES.	1899				1900			
	Male.	Fe- male.	TOTAL.		Male.	Fe- male.	TOTAL.	
			No.	Per ct.			No.	Per ct.
Beverages—20 Establishments.								
Under \$5.00	23	2	31	12.76	28	.....	28	10.52
\$5.00 but under \$6.00	12	.....	12	4.94	13	.....	13	4.89
6.00 but under 7.00	21	2	23	.....	30	2	32	12.03
7.00 but under 8.00	47	.....	47	19.34	64	.....	64	24.06
8.00 but under 9.00	14	1	15	6.17	22	1	23	8.65
9.00 but under 10.00	25	.....	25	10.29	26	2	28	10.52
10.00 but under 12.00	42	.....	42	17.28	47	.....	47	17.67
12.00 but under 15.00	29	.....	29	11.93	18	.....	18	6.77
15.00 but under 20.00	16	.....	16	6.58	13	.....	13	4.89
20.00 and over	3	.....	3	1.24	.....	.....	.....	.....
Total	238	5	243	100.00	261	5	266	100.00
Chemicals—9 Establishments.								
Under \$5.00	6	15	21	17.80	8	17	25	21.74
\$5.00 but under \$6.00 .....	.....	4	4	3.39	7	3	10	8.70
6.00 but under 7.00	4	4	8	6.78	9	4	13	11.30
7.00 but under 8.00	9	.....	9	7.63	11	.....	11	9.57
8.00 but under 9.00	9	.....	9	7.63	11	1	12	10.43
9.00 but under 10.00	13	.....	13	11.02	13	.....	13	11.30
10.00 but under 12.00	21	.....	21	17.80	14	.....	14	12.17
12.00 but under 15.00	18	.....	18	15.25	11	.....	11	9.57
15.00 but under 20.00	9	.....	9	7.62	6	.....	6	4.35
20.00 and over	6	.....	6	5.08	1	.....	1	.87
Total	95	23	118	100.00	90	25	115	100.00
Coal and Wood—27 Establishments.								
Under \$5.00	7	.....	7	.30	8	.....	8	.34
\$5.00 but under \$6.00	1	.....	1	.04	1	1	2	.06
6.00 but under 7.00	3	.....	3	.13	3	1	4	.17
7.00 but under 8.00	14	.....	14	.59	32	.....	32	1.35
8.00 but under 9.00	99	.....	99	4.18	121	.....	121	5.10
9.00 but under 10.00	503	.....	503	21.24	467	.....	467	19.67
10.00 but under 12.00	623	.....	623	26.31	572	.....	572	24.09
12.00 but under 15.00	756	.....	756	31.93	778	.....	778	32.77
15.00 but under 20.00	172	.....	172	7.26	190	.....	190	8.00
20.00 and over	190	.....	190	8.02	200	.....	200	8.43
Total	2,368	.....	2,368	100.00	2,372	2	2,374	100.00
Fancy Articles—12 Establishments.								
Under \$5.00	69	192	261	52.10	52	153	205	41.67
\$5.00 but under \$6.00	17	4	21	4.19	20	16	36	7.32
6.00 but under 7.00	43	1	44	8.78	43	2	45	9.15
7.00 but under 8.00	26	.....	26	5.19	23	2	25	5.08
8.00 but under 9.00	21	.....	21	4.19	22	.....	22	4.47
9.00 but under 10.00	50	.....	50	9.98	42	1	43	8.74
10.00 but under 12.00	28	.....	28	5.59	62	.....	62	12.60
12.00 but under 15.00	30	.....	30	5.99	28	.....	28	5.69
15.00 but under 20.00	12	.....	12	2.39	19	.....	19	3.86
20.00 and over	8	.....	8	1.60	7	.....	7	1.42
Total	304	197	501	100.00	318	174	492	100.00

CLASSIFIED WEEKLY EARNINGS IN 1899-1900.

Table I—Continued.

CLASSIFIED WAGES.	1899				1900			
	Male.	Fe- male.	TOTAL.		Male.	Fe- male.	TOTAL.	
			No.	Per ct.			No.	Per ct.
Grain and Warehouse—18 Establishments.								
Under \$5.00					4	1	5	1.83
\$5.00 but under \$6.00					1		1	.37
6.00 but under 7.00					1		1	.37
7.00 but under 8.00					1		1	.37
8.00 but under 9.00	3		3	.97	1		1	.37
9.00 but under 10.00	80	5	85	27.69	72	5	77	28.30
10.00 but under 12.00	57		57	18.57	62		62	22.71
12.00 but under 15.00	122		122	39.74	83		83	30.40
15.00 but under 20.00	34		34	11.08	35		35	12.82
20.00 and over	6		6	1.95	7		7	2.56
Total	302	5	307	100.00	267	6	273	100.00

Laundries—69 Establishments.

Under \$5.00	7	319	326	33.61	26	336	362	36.16
\$5.00 but under \$6.00	6	238	244	25.15	8	188	196	19.58
6.00 but under 7.00	12	144	156	16.08	11	167	178	17.78
7.00 but under 8.00	13	38	51	5.26	13	64	77	7.69
8.00 but under 9.00	14	12	26	2.68	9	21	30	3.00
9.00 but under 10.00	35	6	41	4.23	25	8	33	3.30
10.00 but under 12.00	50	9	59	6.08	50	12	62	6.19
12.00 but under 15.00	43	3	46	4.74	41	3	44	4.40
15.00 but under 20.00	18		18	1.86	17		17	1.70
20.00 and over	3		3	.31	2		2	.20
Total	201	769	970	100.00	302	799	1,001	100.00

Light and Power and Street Railways—65 Establishments.

Under \$5.00	60	1	61	1.94	60	1	61	1.83
\$5.00 but under \$6.00	5		5	.16	6		6	.21
6.00 but under 7.00	9	2	11	.35	8	2	10	.66
7.00 but under 8.00	26	1	27	.86	24	1	25	1.35
8.00 but under 9.00	183	1	184	5.86	208		208	6.25
9.00 but under 10.00	428		428	13.62	511		511	15.35
10.00 but under 12.00	1,086	1	1,087	34.60	1,101		1,101	33.06
12.00 but under 15.00	846		846	26.92	824		824	24.75
15.00 but under 20.00	460		460	14.64	488		488	14.65
20.00 and over	33		33	1.05	63		63	1.99
Total	3,136	6	3,142	100.00	3,325	5	3,330	100.00

Lithographing—12 Establishments.

Under \$5.00	112	54	166	33.74	105	54	159	33.13
\$5.00 but under \$6.00	21		21	4.27	28	1	29	6.04
6.00 but under 7.00	34	1	35	7.11	27	1	28	5.83
7.00 but under 8.00	25	1	26	5.29	20	1	21	4.38
8.00 but under 9.00	21		21	4.27	24		24	5.00
9.00 but under 10.00	12		12	2.44	17		17	3.54
10.00 but under 12.00	43	1	44	8.94	40		40	8.33
12.00 but under 15.00	44		44	8.94	43		43	8.96
15.00 but under 20.00	70		70	14.23	55		55	11.46
20.00 and over	53		53	14.77	64		64	13.33
Total	435	57	492	100.00	423	57	480	100.00

CLASSIFIED WEEKLY EARNINGS IN 1899-1900.

Table I—Continued.

CLASSIFIED WAGES.	1899				1900			
	Male.	Fe- male.	TOTAL.		Male.	Fe- male.	TOTAL.	
			No.	Per ct.			No.	Per ct.
Miscellaneous—42 Establishments.								
Under \$5.00	182	540	722	33.35	429	321	750	32.71
\$5.00 but under \$6.00	81	32	63	2.91	56	55	111	4.84
6.00 but under 7.00	119	20	139	6.42	131	29	160	6.98
7.00 but under 8.00	158	5	163	7.53	147	12	159	6.93
8.00 but under 9.00	179	3	182	8.41	122	4	126	5.50
9.00 but under 10.00	151	1	151	6.79	235	6	241	10.51
10.00 but under 12.00	333	1	334	15.43	358	2	360	15.70
12.00 but under 15.00	210	1	211	9.74	180	1	181	7.89
15.00 but under 20.00	58	.....	58	2.68	50	.....	50	2.18
20.00 and over	142	.....	142	6.56	155	.....	155	6.76
Total	1,562	603	2,165	100.00	1,863	430	2,293	100.00

Mixed Textiles—7 Establishments.								
Under \$5.00	97	255	352	65.55	78	265	343	66.09
\$5.00 but under \$6.00	8	48	56	10.43	11	48	59	11.37
6.00 but under 7.00	6	29	35	6.52	1	22	23	4.43
7.00 but under 8.00	11	18	29	5.40	11	12	23	4.43
8.00 but under 9.00	5	3	8	1.49	12	3	15	2.89
9.00 but under 10.00	9	.....	9	1.68	11	3	14	2.70
10.00 but under 12.00	9	1	10	1.86	5	.....	5	.96
12.00 but under 15.00	29	.....	29	5.40	30	.....	30	5.73
15.00 but under 20.00	7	.....	7	1.30	5	.....	5	.96
20.00 and over	2	.....	2	.37	2	.....	2	.39
Total	183	354	537	100.00	166	353	519	100.00

Printers and Publishers—89 Establishments.

Under \$5.00	194	135	329	28.41	202	134	336	28.19
\$5.00 but under \$6.00	70	24	94	8.12	66	32	98	8.22
6.00 but under 7.00	53	11	64	5.53	50	27	77	6.46
7.00 but under 8.00	53	16	69	5.96	59	11	70	5.87
8.00 but under 9.00	47	15	62	5.35	71	13	84	7.05
9.00 but under 10.00	73	4	77	6.65	73	3	76	6.38
10.00 but under 12.00	119	14	133	11.49	119	11	130	10.91
12.00 but under 15.00	161	2	163	14.07	153	5	158	13.25
15.00 but under 20.00	95	.....	95	8.20	114	.....	114	9.55
20.00 and over	72	.....	72	6.22	49	.....	49	4.11
Total	937	221	1,158	100.00	956	236	1,192	100.00

Railway Equipment—13 Establishments.

Under \$5.00	26	.....	26	.48	52	.....	52	.99
\$5.00 but under \$6.00	7	.....	7	.13	3	.....	3	.06
6.00 but under 7.00	89	.....	89	1.63	93	.....	93	1.77
7.00 but under 8.00	739	3	741	13.60	699	3	702	13.35
8.00 but under 9.00	500	.....	500	9.18	519	.....	520	9.89
9.00 but under 10.00	1,202	.....	1,202	22.06	1,078	1	1,079	20.52
10.00 but under 12.00	940	.....	940	17.25	871	.....	871	16.56
12.00 but under 15.00	1,060	.....	1,060	19.45	1,028	.....	1,028	19.55
15.00 but under 20.00	577	.....	577	10.59	590	.....	590	11.21
20.00 and over	307	.....	307	5.63	321	.....	321	6.10
Total	5,446	3	5,449	100.00	5,254	5	5,259	100.00

PERSONS EMPLOYED, BY MONTHS—PER CENT., 1899 AND 1900—
12 INDUSTRIES.

Table II.

CLASSIFICATION BY MONTHS.	Persons Em- ployed in		Per Cent. of Em- ployment in		Per Cent. of Un- employment in	
	1899.	1900.	1899.	1900.	1899.	1900.
Beverages—20 Establishments.						
January	177	189	74.68	74.70	25.32	25.30
February	175	192	73.84	75.89	26.16	24.11
March	194	201	81.86	79.45	18.14	20.55
April	217	224	91.56	88.54	8.44	11.46
May	223	231	94.09	91.30	5.91	8.70
June	227	234	95.78	92.77	4.22	7.23
July	227	253	100.00	100.00	.....	.....
August	229	251	96.62	99.21	3.38	.79
September	225	230	94.94	90.91	5.06	9.09
October	206	208	87.76	82.21	12.24	17.79
November	201	183	84.81	72.33	15.19	27.67
December	191	183	80.59	72.33	19.41	27.67
Average	209	215	88.19	84.98	11.81	15.02
Chemicals—9 Establishments.						
January	71	79	62.83	74.53	37.17	25.47
February	68	78	60.18	73.58	39.82	26.42
March	70	77	61.95	72.64	38.05	27.36
April	75	77	66.37	72.64	33.63	27.36
May	96	96	84.96	90.57	15.04	9.43
June	97	98	85.84	92.45	14.16	7.55
July	104	98	92.04	92.45	7.96	7.55
August	108	99	95.58	93.40	4.42	6.60
September	113	97	100.00	91.51	.....	8.49
October	110	97	97.35	91.51	2.65	8.49
November	107	106	94.69	100.00	5.31	.....
December	85	80	75.22	75.47	24.78	24.53
Average	92	90	81.42	84.91	18.58	15.09
Coal and Wood—27 Establishments.						
January	1,335	1,209	63.57	55.95	36.43	44.05
February	1,375	1,333	65.48	58.68	34.52	41.32
March	1,299	1,213	61.86	56.13	38.14	43.87
April	1,230	1,169	58.57	54.10	41.43	45.90
May	1,655	1,657	79.29	76.68	20.71	23.32
June	1,608	1,571	76.57	72.70	23.43	27.30
July	1,774	1,773	84.48	82.05	15.52	17.95
August	1,957	1,964	93.19	90.88	6.81	9.12
September	2,088	2,022	99.43	98.57	.57	6.43
October	2,100	2,161	100.00	100.00	.....	.....
November	1,977	1,939	94.14	89.73	5.86	10.27
December	1,633	1,579	77.76	73.07	22.24	26.93
Average	1,669	1,627	79.48	75.29	20.52	24.71
Fancy Articles—12 Establishments.						
January	359	373	72.23	76.54	27.77	23.46
February	382	378	76.86	77.78	23.14	22.22
March	402	433	80.89	89.09	19.11	10.91
April	396	419	97.68	86.21	2.32	13.79
May	408	416	82.09	85.60	17.91	14.40
June	399	390	80.26	80.25	19.74	19.75
July	421	401	84.71	82.51	15.29	17.49
August	442	417	88.93	85.80	11.07	14.20
September	433	409	87.12	84.16	12.88	15.84
October	466	459	93.76	94.44	6.24	5.56
November	487	470	97.99	96.71	2.01	3.29
December	497	486	100.00	100.00	.....	.....
Average	424	421	85.31	86.63	14.69	13.37

MANUFACTURERS' RETURNS FOR 1900-1901.

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PERSONS EMPLOYED, BY MONTHS—PER CENT., 1899-1900.

Table II—Continued.

CLASSIFICATION BY MONTHS.	Persons Em- ployed in		Per Cent. of Em- ployment in		Per Cent. of Un- employment in	
	1899.	1900.	1899.	1900.	1900.	1899.
Grain and Warehouse—18 Establishments.						
January	220	211	73.83	75.09	26.17	24.91
February	206	207	69.13	73.67	30.87	26.33
March	214	230	71.81	81.86	28.19	18.16
April	217	227	72.32	80.78	27.18	19.22
May	212	217	71.14	77.21	28.86	22.79
June	218	206	73.15	73.31	26.85	26.69
July	211	206	70.87	73.31	29.13	26.69
August	213	203	71.14	72.24	28.86	27.76
September	287	243	96.31	86.48	3.69	13.52
October	298	281	100.00	100.00	.....	.....
November	270	265	90.60	94.31	9.40	5.69
December	240	232	80.54	82.56	19.46	17.44
Average	234	227	78.52	80.78	21.48	19.22

Laundries—69 Establishments.

January	711	763	73.53	77.70	26.47	22.30
February	724	760	74.87	77.39	25.13	22.61
March	745	769	77.04	78.31	22.96	21.69
April	791	818	81.80	83.90	18.20	16.10
May	850	882	87.90	89.82	12.10	10.18
June	922	954	95.35	97.15	4.65	2.85
July	945	978	97.72	99.59	2.28	.41
August	967	982	100.00	100.00	.....	.....
September	958	963	99.07	98.07	.93	1.93
October	865	882	89.45	89.82	10.55	10.18
November	828	831	85.63	84.62	14.37	15.38
December	793	813	82.01	82.79	17.99	17.21
Average	842	866	87.08	88.19	12.92	11.81

Light, Power and Street Railways—65 Establishments.

January	2,085	2,156	72.40	69.80	27.60	30.20
February	2,150	2,231	74.65	72.22	25.35	27.78
March	2,226	2,291	77.29	74.17	22.71	25.83
April	2,341	2,506	81.28	81.13	18.72	18.87
May	2,807	2,955	99.47	95.99	.53	4.01
June	2,880	3,059	100.00	99.03	.....	.97
July	2,871	3,089	99.69	100.00	.31	.....
August	2,719	2,906	94.41	94.08	5.59	5.92
September	2,656	2,823	92.22	91.39	7.78	8.61
October	2,700	2,846	93.75	92.13	6.25	7.87
November	2,665	2,772	92.53	89.74	7.47	10.26
December	2,684	2,769	93.19	90.00	6.81	10.00
Average	2,565	2,701	89.06	87.78	10.94	12.22

Lithographing—12 Establishments.

January	472	459	96.11	94.64	3.89	5.36
February	465	457	94.70	94.23	5.30	5.77
March	471	456	95.93	94.02	4.07	5.98
April	471	465	95.93	95.88	4.07	4.12
May	468	469	95.32	96.70	4.68	3.30
June	475	450	96.74	92.78	3.26	7.22
July	466	453	94.91	93.40	5.09	6.60
August	461	460	93.89	94.82	6.11	5.18
September	471	448	95.93	92.37	4.07	7.63
October	479	462	97.55	95.26	2.45	4.74
November	491	485	100.00	100.00	.....	.....
December	484	471	98.57	97.11	1.43	2.89
Average	473	461	96.33	95.05	3.67	4.96

PERSONS EMPLOYED, BY MONTHS—PER CENT., 1899-1900.

Table II—Continued.

CLASSIFICATION OF MONTHS.	Persons Em- ployed in		Per Cent. of Em- ployment in		Per Cent. of Un- employment in	
	1899.	1900.	1899.	1900.	1899.	1900.
Miscellaneous—42 Establishments.						
January	1,651	1,769	84.23	88.32	15.77	11.68
February	1,694	1,804	86.43	90.06	13.57	9.94
March	1,851	1,965	94.44	98.10	5.56	1.90
April	1,960	2,003	100.00	100.00		
May	1,814	1,920	92.55	96.86	7.45	4.14
June	1,483	1,864	75.66	93.06	24.34	6.94
July	1,466	1,554	74.80	77.58	25.20	22.42
August	1,768	1,623	90.20	76.04	9.80	23.95
September	1,716	1,799	87.55	89.82	12.45	10.18
October	1,647	1,777	84.03	88.72	15.97	11.28
November	1,760	1,826	90.00	91.16	10.00	8.84
December	1,735	1,774	88.56	88.57	11.44	11.43
Average	1,712	1,798	87.35	89.77	12.65	2.23
Mixed Textiles—7 Establishments.						
January	469	416	90.19	86.13	9.81	13.87
February	480	452	92.31	93.58	7.69	6.42
March	495	478	95.19	98.96	4.81	1.04
April	520	483	100.00	100.00		
May	493	472	94.81	97.72	5.19	2.28
June	484	430	93.08	89.03	6.92	10.97
July	423	406	81.35	84.06	18.65	15.94
August	398	394	76.54	81.57	23.46	18.43
September	396	287	76.15	59.42	23.85	40.53
October	414	402	79.62	83.28	20.38	16.72
November	445	424	85.58	87.78	14.42	12.22
December	465	457	89.42	94.62	10.58	5.38
Average	457	425	87.88	87.99	12.12	12.01
Printers and Publishers—89 Establishments.						
January	1,130	1,082	96.25	96.35	3.75	3.65
February	1,143	1,080	97.36	96.17	2.64	3.83
March	1,141	1,096	97.19	97.60	2.81	2.40
April	1,174	1,099	100.00	97.86		2.14
May	1,143	1,096	97.36	97.60	2.64	2.40
June	1,119	1,087	95.32	96.79	4.68	3.21
July	1,146	1,072	97.62	95.46	2.38	4.54
August	1,130	1,104	96.25	98.31	3.75	1.69
September	1,132	1,094	96.42	97.42	3.58	2.58
October	1,128	1,107	96.08	98.53	3.92	1.42
November	1,138	1,104	96.93	98.31	3.07	1.69
December	1,161	1,123	98.89	100.00	1.11	
Average	1,140	1,095	97.10	97.51	2.90	2.49
Railway Equipment—13 Establishments.						
January	4,976	4,668	97.86	90.62	2.14	9.38
February	4,925	4,530	96.04	87.94	3.96	2.06
March	5,101	4,523	99.47	87.81	1.53	12.19
April	5,039	4,707	98.26	91.38	1.74	8.62
May	5,101	4,740	99.47	92.02	1.53	7.98
June	5,062	4,825	98.71	93.22	1.29	6.78
July	5,077	4,844	99.01	94.04	1.99	5.96
August	5,058	4,888	98.63	94.89	1.37	5.11
September	5,128	5,151	100.00	100.00		
October	5,124	5,066	99.92	98.35	1.08	1.65
November	4,867	4,850	94.91	94.16	5.09	5.84
December	4,893	4,807	95.42	93.32	4.58	6.68
Average	5,029	4,800	98.07	93.19	1.93	6.81

TOTAL YEARLY EARNINGS IN 1899-1900-12 INDUSTRIES.

Table III.

INDUSTRIES.	No. of establishments.	TOTAL YEARLY EARNINGS IN		INCREASE + DECREASE - IN 1900.	
		1899.	1900.	Amount.	Per cent.
Beverages	20	\$35,705 13	\$31,273 53	+	\$5,568 40 6.50
Chemicals	9	40,143 27	42,273 14	+	2,129 87 5.31
Coal and wood	27	848,029 29	840,890 63	-	7,138 66 .84
Fancy articles	12	117,181 77	133,785 42	+	16,603 65 14.11
Grain and warehouses..	18	127,583 80	116,673 97	-	10,909 83 9.33
Laundries	69	243,167 11	257,366 98	+	14,199 87 5.84
Light, power and street railways	65	1,418,206 32	1,396,872 75	-	21,333 57 1.50
Lithographing	12	214,828 19	218,205 92	+	3,377 73 1.11
Miscellaneous	42	526,823 53	629,918 72	+	103,095 19 40.14
Mixed textiles	7	116,714 19	114,844 05	-	1,870 14 1.60
Printers and publishers.	89	510,476 50	488,193 62	-	22,282 88 4.37
Railway equipment	13	2,972,359 84	2,904,765 89	-	67,593 95 2.27
Total	383	\$7,221,218 94	\$7,335,064 62	+	\$113,845 68 1.58

AVERAGE YEARLY EARNINGS IN 1899 AND 1900-12 INDUSTRIES.

Table IV.

INDUSTRIES.	No. of establishments.	AVERAGE YEARLY EARNINGS IN		INCREASE + DECREASE - IN 1900.	
		1899.	1900.	Amount.	Per cent.
Beverages	20	\$410 07	\$424 53	+	\$14 46 3.22
Chemicals	9	436 34	469 70	+	33 36 7.28
Coal and wood	27	608 11	510 69	+	2 58 .25
Fancy articles	12	276 37	317 78	+	41 41 14.27
Grain and warehouses..	18	546 23	513 98	-	31 25 6.41
Laundries	69	288 80	297 19	+	8 39 2.26
Light, power and street railways	65	552 91	517 17	-	35 74 6.47
Lithographing	12	454 18	473 13	+	18 95 4.18
Miscellaneous	42	397 72	367 30	+	59 58 12.27
Mixed textiles	7	255 39	270 22	+	14 83 5.21
Printers and publishers..	89	446 22	445 84	-	.38 .04
Railway equipment	13	591 04	615 81	+	24 77 4.11
Average	383	\$422 70	\$435 28	+	\$12 58 2.98

**AVERAGE NUMBER OF DAYS IN OPERATION, 1899 AND 1900—
12 INDUSTRIES.**

Table V.

INDUSTRIES.	No. of establishments.	DAYS IN OPERATION IN		INCREASE + DECREASE — IN 1900.	
		1899.	1900.	Amount.	Per cent.
Beverages	20	294	295	+ 1	.34
Chemicals	9	293	330	+ 37	12.63
Coal and wood	27	301	301	.....	.....
Fancy articles	12	300	301	+ 1	.33
Grain and warehouses ..	18	290	302	+ 12	4.14
Laundries	69	282	286	+ 4	1.42
Light, power and street railways	65	361	363	+ 2	.55
Lithographing	12	305	301	— 4	1.31
Miscellaneous	42	293	289	— 4	1.37
Mixed textiles	7	300	294	— 6	2.00
Printers and publishers..	89	307	308	+ 1	.33
Railway equipment	13	308	315	+ 7	2.27
Average	383	303	307	+ 4	1.32

The foregoing tables thus show for 383 establishments in 12 industries in 1899 and 1900, the classified weekly earnings, the number of persons employed by months, the total amount paid as wages, the average yearly earnings to each worker, and the average number of days in operation. These facts are presented by industries and in such a way as to facilitate comparisons between each.

The total number of persons for the 12 industries who received classified weekly earnings for the two years are presented in the following table:

**NUMBER OF PERSONS IN 12 INDUSTRIES RECEIVING CLASSIFIED
WEEKLY EARNINGS IN 1899 AND 1900.**

CLASSIFIED WEEKLY EARNINGS.	1899			1900		
	Male.	Female.	Total.	Male.	Female.	Total.
Under \$5.00	789	1,513	2,302	1,052	1,282	2,334
\$5.00 but under \$6.00	178	350	528	220	345	565
6.00 but under 7.00	393	214	607	419	257	676
7.00 but under 8.00	1,120	82	1,202	1,124	106	1,230
8.00 but under 9.00	1,095	35	1,130	1,142	44	1,186
9.00 but under 10.00	2,580	16	2,596	2,570	29	2,599
10.00 but under 12.00	3,351	27	3,378	3,301	25	3,326
12.00 but under 15.00	3,348	6	3,354	3,217	9	3,226
15.00 but under 20.00	1,528	.....	1,528	1,581	.....	1,581
20.00 and over	825	.....	825	871	.....	871
Total	15,207	2,243	17,450	15,497	2,097	17,594
Per cent.	87.15	12.85	100.00	88.08	11.92	100.00

This is a sort of a summary of Table I. It includes all of the 12 industries and for male, female, and the total shows the respective number of persons in each wage class together with the total for all.

For the male persons the greatest number for both years are found in the class \$10 but under \$12. For the females the greatest is found in the class under \$5.

In 1899 the total number of all classes was 17,450. Of these 15,207 were male and 2,243 female.

In 1900 the total for all was 17,594, and of these 15,497 were male persons, and 2,097 females.

In the following table the number of persons as shown above are expressed in their present relation to their totals.

PER CENT. OF PERSONS IN 12 INDUSTRIES RECEIVING CLASSIFIED WEEKLY EARNINGS IN 1899 AND 1900.

CLASSIFIED WEEKLY EARNINGS.	1899			1900		
	Male.	Female.	Total.	Male.	Female.	Total.
Under \$5.00	5.19	67.46	13.19	6.79	61.14	13.26
\$5.00 but under \$8.00.....	1.17	15.60	3.03	1.42	16.45	3.21
6.00 but under 7.00.....	2.58	9.54	3.48	2.70	12.26	3.84
7.00 but under 8.00.....	7.36	3.66	6.89	7.25	5.05	6.99
8.00 but under 9.00.....	7.20	1.56	6.47	7.37	2.10	6.74
9.00 but under 10.00.....	16.97	.71	14.87	16.59	1.38	14.77
10.00 but under 12.00.....	2,204	1.20	19.36	21.50	1.19	18.91
12.00 but under 15.00.....	22.02	.27	19.22	20.76	.43	18.34
15.00 but under 20.00.....	10.05	.....	8.76	10.20	.....	8.99
20.00 and over	5.42	.....	4.73	5.62	.....	4.95
Total	100.00	100.00	100.00	100.00	100.00	100.00

This table relates to percentages. It shows for instance that in 1899, 5.19 per cent. of all the male persons, 67.46 per cent. of all the female persons and 13.19 per cent. of the total of both received under \$5 per week, and that in 1900 this relation stood at 6.79, 61.14, and 13.26 per cent. respectively. The largest proportion of the persons, however, are found in the classes \$10 but under \$12 and \$12 but under \$15 per week. These two classes included 38.58 per cent. of the persons in 1899, and 37.25 per cent. of the persons in 1900.

The table which follows shows the relative proportion of male and female persons in each wage class.

PER CENT. OF MALES AND FEMALES IN 12 INDUSTRIES RECEIVING
CLASSIFIED WEEKLY EARNINGS IN 1899 AND 1900.

CLASSIFIED WEEKLY EARNINGS.	1899			1900		
	Male.	Female.	Total.	Male.	Female.	Total.
Under \$5.00	34.27	65.73	100.00	45.07	54.93	100.00
\$5.00 but under \$6.00	33.71	66.29	100.00	38.94	61.06	100.00
6.00 but under 7.00	64.74	35.26	100.00	61.98	38.02	100.00
7.00 but under 8.00	93.18	6.82	100.00	91.38	8.62	100.00
8.00 but under 9.00	96.90	3.10	100.00	96.29	3.71	100.00
9.00 but under 10.00	99.38	.62	100.00	98.88	1.12	100.00
10.00 but under 12.00	99.20	.80	100.00	99.25	.75	100.00
12.00 but under 15.00	99.82	.18	100.00	99.72	.28	100.00
15.00 but under 20.00	100.00	.....	100.00	100.00	.....	100.00
20.00 and over	100.00	.....	100.00	100.00	.....	100.00
Total	87.15	12.85	100.00	88.08	11.92	100.00

The above tables shows the per cent. of males and females. Thus in class under \$5, 34.27 per cent. were males and 65.73 per cent. were females in 1899, while in 1900 the relation was, males 45.07 per cent., females 54.93 per cent.

Of the total number employed in 1899, 87.15 per cent. were male and 12.85 per cent. female persons.

In 1900, 88.08 per cent. of the total number were male and 11.92 per cent. were female.

The next table in order is a summary of table II. It shows the total number employed each month by the 12 industries. It also gives the range of employment.

TOTAL NUMBER OF PERSONS EMPLOYED IN THE 12 INDUSTRIES AND
RANGE OF EMPLOYMENT.

MONTHS.	Total No. of Persons Em- ployed in		Percentages of			
			Employment.		Unemployment.	
	1899.	1900.	1899.	1900.	1899.	1900.
January	13,668	13,374	87.59	84.93	12.41	15.07
February	13,787	13,437	88.37	85.33	11.63	14.67
March	14,209	13,732	91.07	87.20	8.93	12.80
April	14,431	14,197	92.49	90.15	7.51	9.85
May	15,270	15,161	97.87	96.27	2.13	3.73
June	14,974	15,168	95.97	96.32	4.03	3.68
July	15,141	15,127	97.05	96.06	2.95	3.94
August	15,450	15,191	99.03	96.46	.97	3.54
September	15,603	15,566	100.00	98.84	.....	1.16
October	15,539	15,748	99.60	100.00	.40	.....
November	15,236	15,255	97.65	96.87	2.35	3.13
December	14,861	14,774	95.25	93.82	4.75	6.18
Average	14,847	14,728	95.16	93.52	4.84	6.48

In the above summary is seen for the twelve industries the total number employed each month in 1899 and 1900.

The greatest number for any month is found in September for 1899 and in October for 1900. The smallest number for both years is found in January. The difference between the two amounted to 12.41 per cent. in the former and 15.07 in the latter year. This difference was the range of unemployment in January, or in other words, it was the proportion of persons who, during that month, could not find employment in the establishments included.

The average number of persons was 14,847 in 1899, and 14,728 in 1900; and the average range of unemployment was accordingly 4.84 and 6.48 per cent. respectively for these years.

As already explained table III relates to the total amount paid as wages. It gives this amount for each industry as well as for all, the total being \$7,221,218.94 in 1899, and \$7,335,064.62 in 1900. For the latter year there was an increase of \$113,845.68 or of 1.58 per cent.

Of the 12 industries, 6 show an increase in the amount paid as wages and 6 a decrease, but as stated the former on the whole exceeded the latter.

In table IV was given the average yearly earnings to each worker. It shows that the average was \$422.70 in 1899 and \$435.28 in 1900. This is an increase for the latter year of \$12.58, or 2.98 per cent. Nine industries show an increase in the earnings and three a decrease.

Table V shows the average number of days in operation. For 1899 the average was 303 days, for 1900 it was 307 days. The increase for the latter year thus amounted to 4 days, or to 1.32 per cent. Eight industries gave an increase, three a decrease and one no change.

EMPLOYMENT AND EARNINGS IN 12 INDUSTRIES IN 1900 AND 1901.

Under this head are found several presentations that have been compiled from the reports of 356 establishments classified in 12 industries. The reports covered the years 1900 and 1901.

The industries into which the reports were classified are as follows: Beverages, chemicals, coal and wood, electric and gas light plants, etc., grain elevators, fancy articles, laundries, lithographing, mixed textiles, printing and publishing, railway shops, and miscellaneous.

The reports have been compiled into 5 basic tables described as follows: Table I shows, for each industry in 1900 and 1901, the classified weekly earnings for the week when the greatest number of persons were employed. Table II shows for the same industries and period the number of persons employed each month, together with the range of employment and unemployment as based upon the number for the month when the greatest number were employed. Table III shows the total amount paid as wages each year by the establishments included. Table IV shows the average yearly earnings to each employe, and table V gives the average number of days in operation.

The reports for both years were received from the same establishments, and are therefore a good indication of the business situation in the same. But they mean more than this. Representing as they do the greater proportion of the productive capacity of the industries included, they necessarily show the condition of these industries, as a whole, for this state.

CLASSIFIED WEEKLY EARNINGS IN 1900-1901.

Table I.

CLASSIFIED WAGES.	1900				1901			
	Male	Fe-male.	TOTAL.		Male.	Fe-male.	TOTAL.	
			No.	Per ct.			No.	Per ct
Beverages—15 Establishments.								
Under \$5.00	13	.....	13	7.88	13	1	14	8.00
\$5.00 but under \$6.00	10	.....	10	6.06	12	.....	12	6.86
6.00 but under 7.00	22	.....	22	13.33	17	1	18	10.29
7.00 but under 8.00	45	.....	45	27.27	30	.....	30	17.14
8.00 but under 9.00	16	1	17	10.31	15	.....	15	8.57
9.00 but under 10.00	15	2	17	10.31	37	.....	37	21.14
10.00 but under 12.00	27	.....	27	16.36	20	.....	20	11.43
12.00 but under 15.00	8	.....	8	4.85	16	.....	16	9.14
15.00 but under 20.00	6	.....	6	3.63	6	.....	6	3.43
20.00 and over .....	.....	.....	.....	.....	7	.....	7	4.00
Total	162	3	165	100.00	173	2	175	100.00
Chemicals—5 Establishments.								
Under \$5.00	3	5	8	15.39	10	.....	10	16.39
\$5.00 but under \$6.00	5	.....	5	9.62	1	1	2	3.28
6.00 but under 7.00	8	3	11	21.15	7	4	11	18.03
7.00 but under 8.00	7	.....	7	13.46	7	.....	7	11.47
8.00 but under 9.00	9	1	10	19.23	4	.....	4	6.56
9.00 but under 10.00	4	.....	4	7.69	2	2	4	6.56
10.00 but under 12.00	4	.....	4	7.69	14	1	15	24.59
12.00 but under 15.00	1	.....	1	1.92	6	.....	6	9.84
15.00 but under 20.00	2	.....	2	3.85	.....	.....	.....	.....
20.00 and over .....	.....	.....	.....	.....	2	.....	2	3.28
Total	43	9	52	100.00	53	8	61	100.00
Coal and Wood—21 Establishments.								
Under \$5.00	6	.....	6	.40	1	.....	1	.09
\$5.00 but under \$6.00 .....	.....	1	1	.07	1	1	2	.17
6.00 but under 7.00	2	1	3	.20	8	1	9	.78
7.00 but under 8.00	36	.....	36	2.40	17	.....	17	1.48
8.00 but under 9.00	126	.....	126	8.40	29	.....	29	2.52
9.00 but under 10.00	292	.....	292	19.45	266	.....	266	23.07
10.00 but under 12.00	307	.....	307	20.45	452	.....	452	59.20
12.00 but under 15.00	483	.....	483	32.18	183	.....	183	15.87
15.00 but under 20.00	129	.....	129	8.59	103	.....	103	8.93
20.00 and over	118	.....	118	7.86	91	.....	91	7.89
Total	1,499	2	1,501	100.00	1,151	2	1,153	100.00
Electric and Gas Light—66 Establishments.								
Under \$5.00	64	1	65	2.24	62	2	64	2.42
\$5.00 but under \$6.00	5	1	6	.21	5	.....	5	.19
6.00 but under 7.00	19	.....	19	.66	11	1	12	.46
7.00 but under 8.00	46	.....	46	1.59	61	1	62	2.36
8.00 but under 9.00	163	.....	163	5.63	209	.....	209	7.92
9.00 but under 10.00	408	.....	408	14.08	427	.....	427	16.18
10.00 but under 12.00	817	.....	817	28.20	821	.....	821	31.16
12.00 but under 15.00	821	.....	821	28.34	863	.....	863	32.71
15.00 but under 20.00	501	.....	501	17.29	141	.....	141	5.34
20.00 and over	51	.....	51	1.76	34	.....	34	1.29
Total	2,895	2	2,897	100.00	2,634	4	2,638	100.00

CLASSIFIED WEEKLY EARNINGS IN 1900-1901.

Table 1—Continued.

CLASSIFIED WAGES.	1900				1901			
	Male.	Fe- male.	TOTAL.		Male.	Fe- male.	TOTAL.	
			No.	Per ct.			No.	Per ct.
Elevator and Grain Warehouses—18 Establishments.								
Under \$5.00	1	1	2	.91	1	.....	1	.44
\$5.00 but under \$6.00	1	.....	1	.45	.....	.....	.....	.....
6.00 but under 7.00	2	.....	2	.91	3	.....	3	1.32
7.00 but under 8.00	8	.....	8	3.62	10	.....	10	4.41
8.00 but under 9.00 .....	.....	.....	.....	.....	3	.....	3	1.32
9.00 but under 10.00	32	.....	32	14.48	31	.....	31	13.66
10.00 but under 12.00	69	.....	69	31.22	74	.....	74	32.60
12.00 but under 15.00	76	.....	76	34.59	78	.....	78	34.36
15.00 but under 20.00	26	.....	26	11.76	21	.....	21	9.25
20.00 and over	5	.....	5	2.26	6	.....	6	2.64
Total	220	1	221	100.00	227	.....	227	100.00

Fancy Articles—12 Establishments.

Under \$5.00	52	153	205	41.67	53	139	192	40.51
\$5.00 but under \$6.00	20	16	36	7.32	26	10	36	7.59
6.00 but under 7.00	43	2	45	9.15	38	1	39	8.23
7.00 but under 8.00	23	2	25	5.08	29	1	30	6.33
8.00 but under 9.00	22	.....	22	4.47	22	.....	22	4.64
9.00 but under 10.00 .....	.....	1	43	8.74	39	1	40	8.44
10.00 but under 12.00	62	.....	62	12.60	42	.....	42	8.86
12.00 but under 15.00	28	.....	28	5.69	41	.....	41	8.65
15.00 but under 20.00	19	.....	19	3.86	23	1	24	5.06
20.00 and over	7	.....	7	1.42	8	.....	8	1.69
Total	318	174	492	100.00	321	153	474	100.00

Laundry—69 Establishments.

Under \$5.00	16	328	344	32.73	13	296	309	29.18
\$5.00 but under \$6.00	10	211	221	21.03	9	251	260	24.55
6.00 but under 7.00	12	157	169	16.08	10	168	178	16.81
7.00 but under 8.00	15	86	101	9.61	21	82	103	9.73
8.00 but under 9.00	10	32	42	4.00	15	26	41	3.87
9.00 but under 10.00	25	5	30	2.86	17	6	23	2.17
10.00 but under 12.00	52	11	63	5.99	49	10	59	5.57
12.00 but under 15.00	47	4	51	4.85	54	2	56	5.29
15.00 but under 20.00	26	.....	26	2.47	28	.....	28	2.64
20.00 and over	4	.....	4	.38	2	.....	2	.19
Total	217	834	1,051	100.00	218	841	1,059	100.00

Lithographing—12 Establishments.

Under \$5.00	105	54	159	32.38	105	111	216	39.13
\$5.00 but under \$6.00	28	1	29	5.91	21	2	23	4.17
6.00 but under 7.00	27	1	28	5.70	20	1	21	3.81
7.00 but under 8.00	21	.....	22	4.48	27	.....	27	4.89
8.00 but under 9.00	24	.....	24	4.89	27	1	29	5.23
9.00 but under 10.00	17	.....	17	3.46	28	1	29	5.08
10.00 but under 12.00	40	.....	40	8.15	43	.....	43	7.79
12.00 but under 15.00	43	.....	43	8.76	49	.....	49	8.88
15.00 but under 20.00	65	.....	65	13.24	59	.....	59	10.69
20.00 and over	64	.....	64	13.03	57	.....	57	10.33
Total	434	57	491	100.00	463	116	552	100.00

CLASSIFIED WEEKLY EARNINGS IN 1900-1901.

Table I—Continued.

CLASSIFIED WAGES.	1900				1901			
	Male.	Fe- male.	TOTAL.		Male.	Fe- male.	TOTAL.	
			No.	Per ct			No.	Per ct.
Mixed Textiles—7 Establishments.								
Under \$5.00	78	265	343	66.09	103	286	389	59.76
\$5.00 but under \$6.00	11	48	59	11.37	11	86	97	14.90
6.00 but under 7.00	11	22	23	4.43	11	26	37	5.68
7.00 but under 8.00	11	12	23	4.43	21	17	38	5.84
8.00 but under 9.00	12	3	15	2.89	7	4	11	1.69
9.00 but under 10.00	11	3	14	2.70	18	3	21	3.22
10.00 but under 12.00	5	.....	5	.96	11	1	12	1.84
12.00 but under 15.00	39	.....	39	5.78	38	.....	38	5.84
15.00 but under 20.00	5	.....	5	.96	7	.....	7	1.08
20.00 and over	2	.....	2	.39	1	.....	1	.15
Total	166	353	519	100.00	228	423	651	100.00

Printing and Publishing—100 Establishments.

Under \$5.00	297	226	523	36.91	289	253	542	38.33
\$5.00 but under \$6.00	55	36	91	6.42	50	46	96	6.79
6.00 but under 7.00	46	27	73	5.15	52	27	79	5.59
7.00 but under 8.00	56	13	69	4.87	50	11	61	4.31
8.00 but under 9.00	77	14	91	6.42	63	13	76	5.38
9.00 but under 10.00	68	2	70	4.94	59	7	66	4.67
10.00 but under 12.00	116	19	126	8.90	114	12	126	8.91
12.00 but under 15.00	149	3	152	10.73	157	1	158	11.17
15.00 but under 20.00	162	2	164	11.57	161	2	163	11.53
20.00 and over	58	.....	58	4.09	47	.....	47	3.32
Total	1,084	333	1,417	100.00	1,042	372	1,414	100.00

Railway Equipment—10 Establishments.

Under \$5.00	27	.....	27	.47	22	.....	22	.34
\$5.00 but under \$6.00	10	.....	10	.17	16	.....	16	.25
6.00 but under 7.00	89	.....	89	1.53	87	.....	87	1.36
7.00 but under 8.00	776	3	779	13.43	527	.....	527	8.23
8.00 but under 9.00	520	.....	520	8.96	719	.....	719	11.22
9.00 but under 10.00	1,355	.....	1,355	23.35	1,565	.....	1,565	24.43
10.00 but under 12.00	972	.....	972	16.75	1,060	.....	1,060	16.54
12.00 but under 15.00	1,103	.....	1,103	19.01	1,023	.....	1,023	15.97
15.00 but under 20.00	635	.....	635	10.94	912	.....	912	14.23
20.00 and over	313	.....	313	5.39	476	.....	476	7.43
Total	5,800	3	5,803	100.00	6,407	.....	6,407	100.00

Miscellaneous—21 Establishments.

Under \$5.00	17	99	116	36.71	14	93	107	33.45
\$5.00 but under \$6.00	4	39	43	13.61	6	35	41	12.81
6.00 but under 7.00	11	19	30	9.49	11	19	30	9.37
7.00 but under 8.00	17	10	27	8.55	12	5	17	5.31
8.00 but under 9.00	32	1	33	10.43	46	2	48	15.00
9.00 but under 10.00	11	4	15	4.75	21	.....	21	6.56
10.00 but under 12.00	14	3	17	5.38	18	1	19	5.94
12.00 but under 15.00	21	1	22	6.96	23	1	24	7.50
15.00 but under 20.00	11	.....	12	3.80	12	.....	12	3.75
20.00 and over	1	.....	1	.32	1	.....	1	.81
Total	139	177	316	100.00	164	156	320	100.00

PERSONS EMPLOYED—BY MONTHS—PER CENT. IN 1900—1901—
12 INDUSTRIES.

Table II—Continued.

CLASSIFICATION BY MONTHS.	Persons Em- ployed in		Per Cent. of Em- ployment in		Per Cent. of Un- employed in	
	1900.	1901.	1900.	1901.	1900.	1901.
Mixed Textiles—7 Establishments.						
January	416	468	84.38	90.35	15.62	9.65
February	452	477	91.68	92.08	8.32	7.92
March	478	495	96.96	95.56	3.04	4.44
April	493	499	100.00	96.33	.....	3.67
May	472	496	95.74	95.75	4.26	4.25
June	430	470	87.22	90.73	12.78	9.27
July	406	506	82.35	97.68	17.65	2.32
August	394	518	79.92	100.00	20.08	.....
September	287	439	58.22	84.75	41.78	15.25
October	402	470	81.54	90.73	18.46	9.27
November	424	516	86.00	99.61	14.00	.....
December	457	455	92.70	87.84	7.30	12.16
Average	425	484	86.41	93.44	13.59	6.56
Printing and Publishing—100 Establishments.						
January	1,231	1,316	95.13	95.43	4.87	4.57
February	1,266	1,311	97.84	95.07	2.16	4.93
March	1,258	1,290	97.22	93.55	2.78	6.45
April	1,241	1,285	95.90	93.18	4.10	6.82
May	1,224	1,264	94.59	91.66	5.41	8.34
June	1,212	1,262	93.66	91.52	6.34	8.48
July	1,202	1,250	92.89	90.65	7.11	9.35
August	1,229	1,262	94.98	91.52	5.02	8.48
September	1,254	1,312	96.91	95.14	3.09	4.86
October	1,260	1,335	97.37	96.81	2.63	3.19
November	1,284	1,372	99.23	99.49	.....	.....
December	1,294	1,379	100.00	100.00	.....	.....
Average	1,246	1,303	96.29	94.49	3.71	5.51
Railway Equipment—10 Establishments.						
January	5,394	5,474	97.24	90.23	2.76	9.77
February	5,347	5,517	96.29	90.93	3.61	9.07
March	5,509	5,521	99.31	91.00	.....	9.00
April	5,479	5,544	98.77	91.38	1.23	8.62
May	5,465	5,665	98.52	93.37	1.48	6.63
June	5,464	5,721	98.50	94.30	1.50	5.70
July	5,475	5,797	98.70	95.55	1.30	4.45
August	5,473	5,815	98.67	95.85	1.33	4.15
September	5,532	6,032	99.73	99.42	.....	.....
October	5,547	6,044	100.00	99.62	.....	.....
November	5,303	6,067	95.60	100.00	4.40	.....
December	5,308	5,774	95.69	95.17	4.31	4.83
Average	5,441	5,748	98.09	94.74	1.91	5.26
Miscellaneous—21 Establishments.						
January	214	244	75.09	82.43	24.91	17.57
February	227	269	79.65	87.84	20.35	12.16
March	247	279	86.67	94.26	13.33	5.74
April	266	277	93.33	93.58	6.67	6.42
May	268	287	94.04	96.96	5.96	3.04
June	256	276	89.82	93.24	10.18	6.76
July	249	258	87.37	87.16	12.63	12.84
August	230	251	80.70	84.80	19.30	15.20
September	271	279	95.09	94.26	4.91	5.74
October	279	296	97.89	100.00	2.11	.....
November	285	293	100.00	98.99	.....	1.01
December	264	272	92.63	91.89	7.37	8.11
Average	255	273	89.47	92.23	10.53	7.77

PERSONS EMPLOYED—BY MONTHS—PER CENT. IN 1900-1901.

Table II—Continued.

CLASSIFICATION BY MONTHS.	Persons Em- ployed in		Per cent. of Em- ployment in		Per cent. of Un- employed in	
	1900.	1901.	1900.	1901.	1900.	1901.
Beverages—15 Establishments.						
January	123	135	77.35	80.36	22.15	19.64
February	126	139	79.75	82.74	20.25	17.26
March	129	143	81.65	85.12	18.35	14.88
April	140	150	88.61	89.29	11.39	10.71
May	140	156	88.61	92.86	11.39	7.14
June	142	164	89.87	97.62	10.13	2.38
July	157	168	99.37	100.00	.63	.....
August	158	166	100.00	98.81	.....	1.19
September	157	154	99.37	91.67	.63	8.33
October	146	150	92.41	89.29	7.59	10.71
November	142	147	89.87	87.50	10.13	12.50
December	132	143	83.54	85.12	16.46	14.88
Average	141	151	89.24	89.88	10.76	10.12
Chemicals—5 Establishments.						
January	49	44	94.23	74.58	5.77	25.42
February	49	45	94.23	76.27	5.77	23.73
March	48	46	92.31	77.97	7.69	22.03
April	46	48	88.46	81.36	11.54	18.64
May	45	54	86.54	91.53	13.46	8.47
June	46	54	88.46	91.53	11.54	8.47
July	43	53	82.69	89.83	17.31	10.17
August	42	54	80.77	91.53	19.23	8.47
September	26	46	69.23	76.27	30.77	23.73
October	41	44	78.85	74.58	21.15	25.42
November	52	55	100.00	93.22	.....	6.78
December	51	59	98.08	100.00	1.92	.....
Average	46	50	88.46	84.75	11.54	15.25
Coal and Wood—21 Establishments.						
January	663	884	49.96	74.47	50.04	25.53
February	712	922	53.65	77.67	46.35	22.33
March	691	750	52.07	63.18	47.93	36.82
April	682	718	51.39	60.49	48.61	39.51
May	1,069	889	78.30	74.89	21.70	25.11
June	1,043	1,018	78.60	85.76	21.40	14.24
July	1,130	1,046	85.15	88.12	14.85	11.88
August	1,250	1,121	94.20	94.44	5.80	6.56
September	1,253	1,164	94.42	98.06	5.58	1.94
October	1,327	1,167	100.00	98.32	.....	1.68
November	1,172	1,187	88.32	100.00	11.68	.....
December	930	1,000	70.08	84.25	29.92	15.76
Average	991	989	74.68	83.32	25.32	16.68
Electric and Gas Light and Power—66 Establishments.						
January	2,060	2,149	74.15	74.98	25.85	25.02
February	2,122	2,169	76.39	75.68	23.61	24.32
March	2,195	2,263	79.12	78.96	20.88	21.04
April	2,404	2,453	86.51	85.59	13.46	14.41
May	2,673	2,741	96.22	96.64	3.78	4.36
June	2,778	2,866	.....	.....	.....	.....
July	2,682	2,777	96.54	96.89	3.46	3.11
August	2,686	2,866	96.69	.....	3.31	.....
September	2,633	2,760	94.78	96.30	5.22	3.70
October	2,655	2,773	95.57	96.76	4.43	3.24
November	2,618	2,629	94.24	91.73	5.76	8.27
December	2,370	2,413	85.31	84.19	14.69	15.81
Average	2,490	2,572	89.63	89.74	10.37	10.26

PERSONS EMPLOYED—BY MONTHS—PER CENT IN 1900-1901.

Table II—Continued.

CLASSIFICATION BY MONTHS.	Persons Em- ployed in		Per Cent. of Em- ployment in		Per Cent. of Un- employed in	
	1900.	1901.	1900.	1901.	1900.	1901.
Elevator and Grain Warehouses—18 Establishments.						
January	131	138	67.53	76.67	32.47	23.33
February	128	137	65.98	76.11	34.02	23.89
March	145	162	74.74	90.00	25.26	10.00
April	146	150	75.26	83.33	24.74	16.67
May	141	140	72.68	77.78	27.32	22.22
June	122	125	62.89	69.44	37.11	30.56
July	121	121	62.37	67.22	37.63	32.78
August	119	132	61.34	73.33	38.66	26.67
September	162	153	83.51	85.00	16.49	15.00
October	154	180	100.00	100.00	.....	.....
November	178	163	91.75	90.56	8.25	9.44
December	146	146	75.26	81.11	24.74	18.89
Average	144	146	74.23	81.11	25.77	18.89
Fancy Articles—12 Establishments.						
January	379	361	78.14	81.12	21.86	18.88
February	378	370	77.94	83.15	22.06	16.85
March	434	389	89.48	87.42	10.52	12.58
April	419	378	86.39	84.94	13.61	15.06
May	417	373	85.38	83.82	14.02	16.18
June	390	352	80.41	79.10	19.59	20.90
July	401	374	82.68	84.04	17.32	16.96
August	418	387	86.19	86.97	13.81	13.03
September	408	385	84.12	86.52	15.88	13.48
October	458	416	94.43	93.48	5.57	6.52
November	469	445	96.70	100.00	3.30	.....
December	485	441	100.00	99.10	.....	.90
Average	421	389	86.80	87.42	13.20	12.58
Laundry—69 Establishments.						
January	921	940	81.58	81.53	18.42	18.47
February	900	912	79.72	79.10	20.28	20.90
March	915	914	81.06	79.27	18.95	20.73
April	960	947	85.03	82.13	14.97	17.87
May	1,050	1,064	92.00	92.28	7.00	7.72
June	1,092	1,077	96.72	93.41	3.28	6.59
July	1,129	1,153	100.00	100.00	.....	.....
August	1,118	1,140	99.03	98.87	.97	1.13
September	1,118	1,114	99.03	96.62	.97	3.38
October	1,013	1,040	89.73	90.20	10.27	9.80
November	939	967	87.60	83.87	12.40	16.13
December	944	961	83.61	83.35	16.39	16.65
Average	+ 1,012	+ 1,019	89.64	88.38	10.36	11.62
Lithographing—12 Establishments.						
January	459	512	94.64	94.81	5.36	5.19
February	457	502	94.23	92.96	5.77	7.04
March	456	495	94.02	91.67	5.98	8.33
April	465	496	95.88	91.85	4.12	8.15
May	469	510	96.70	94.44	3.30	5.56
June	460	491	92.78	90.93	7.22	9.07
July	453	483	93.40	89.44	6.60	10.56
August	460	486	94.85	90.00	5.15	10.00
September	448	506	92.37	93.52	7.63	6.48
October	462	509	95.26	94.26	4.74	5.74
November	485	522	100.00	96.67	.....	3.33
December	471	540	97.11	100.00	2.89	.....
Average	461	504	95.05	93.33	4.95	6.67

TOTAL AMOUNT PAID AS WAGES, 1900 AND 1901—12 INDUSTRIES.

Table III.

INDUSTRIES.	No. of establishments.	TOTAL AMOUNT PAID AS WAGES.		INCREASE + DECREASE — IN 1901.	
		1900.	1901.	Amount.	Per cent.
Beverages	15	\$59,975 55	\$66,290 59	+	\$6,315 04 10.53
Chemicals	5	22,602 22	27,724 00	+	5,121 78 22.66
Coal and wood	21	503,487 73	533,457 40	+	29,969 67 5.95
Electric and gas light and power	63	1,431,126 26	1,501,674 33	+	70,548 07 4.93
Elevator and grain warehouses	18	78,674 32	79,213 92	+	539 60 .69
Fancy articles	12	133,786 42	114,831 03	—	18,954 39 14.17
Laundry	69	282,353 33	292,361 51	+	10,008 18 3.54
Lithographing	12	218,206 92	249,156 64	+	30,950 72 14.12
Mixed textiles	7	108,844 05	129,794 72	+	20,950 67 19.25
Printing and publishing	100	534,162 22	556,759 50	+	22,597 28 4.23
Railway equipment	10	3,160,340 78	3,327,700 79	+	167,360 01 5.30
Miscellaneous	21	72,821 40	86,419 91	+	13,598 51 18.67
Total	356	\$6,606,379 20	\$6,965,384 34	+	\$359,005 14 5.43

AVERAGE YEARLY EARNINGS, 1900-1901—12 INDUSTRIES.

Table IV.

INDUSTRIES.	No. of establishments.	AVERAGE YEARLY EARNINGS IN		INCREASE AND DECREASE IN 1901.	
		1900.	1901.	Amount.	Per cent.
Beverages	15	\$425 35	\$439 01	+	\$13 66 3.21
Chemicals	5	491 35	554 48	+	63.13 12.85
Coal and wood	21	508 06	539 39	+	31 33 6.17
Electric and gas light and power	66	574 75	583 85	+	9 10 1.58
Elevator and grain warehouse	18	546 35	542 56	—	3 79 .69
Fancy Articles	12	317 78	295 20	—	22.59 7.11
Laundry	69	279 01	286 81	+	7 90 2.83
Lithographing	12	473 34	494 36	+	21 02 4.44
Mixed textiles	7	255 50	263 17	+	12 67 4.96
Printing and publishing	100	428 70	427 29	—	1 41 .33
Railway equipment	10	580 84	578 93	—	1 91 .33
Miscellaneous	21	285 57	316 56	+	30 99 10.85
Average	356	\$505 27	\$511 26	+	5 99 1.19

AVERAGE NUMBER OF DAYS IN OPERATION IN 1900-1901-12 INDUSTRIES.

Table V.

INDUSTRIES.	No. of establishments.	DAYS IN OPERATION IN		INCREASE + DECREASE — IN 1901.		
		1900.	1901.	Amount.	Per cent.	
Beverages	15	290	296	+	6	2.07
Chemicals	5	253	250	—	3	1.19
Coal and wood	21	307	308	+	1	.33
Electric and gas light and power	66	364	362	—	2	.55
Elevator and grain warehouses	18	279	297	+	18	6.46
Fancy articles	12	301	299	—	2	.66
Laundry	9	289	293	+	4	1.39
Lithographing	12	301	302	+	1	.33
Mixed textiles	7	294	290	—	4	1.36
Printing and publishing	100	302	306	+	4	1.32
Railway equipment	10	302	294	—	8	2.65
Miscellaneous	21	288	284	—	4	1.39
Average	356	298	299	+	1	.34

In the foregoing five tables has thus been presented, for 12 industries for 1900 and 1901, the classified weekly earnings, the number of persons employed each month, etc., the total amount paid as wages, the average yearly earnings to each employe, and the average number of days in operation.

The facts are presented in detail for each industry, and furthermore are arranged in such a way that they may be readily studied, not only as standing alone, or by themselves, but in connection with similar facts for the other industries. Comparisons along these lines could be readily instituted here. But this is hardly necessary. The tables are so plain and the arrangement of the facts in other respects so familiar that any amount of explanation would add but little to their value. For this reason attention will be called to the totals only in each case.

The following is a summary of table I. It shows the number of male, female, and total persons in each wage class as well as the total for all classes when all of the 12 industries are included. The figures cover of course, both years. The table is the first of three summary tables which are given for table I. The second of these shows the per cent of the persons in each class of the total for all classes. The third shows the per cent of males and females in each class as well as of the total number.

**NUMBER OF PERSONS IN 12 INDUSTRIES RECEIVING CLASSIFIED
WEEKLY EARNINGS IN 1900 AND 1901.**

CLASSIFIED WEEKLY EARNINGS.	1900			1901		
	Male.	Female.	Total.	Male.	Female.	Total.
Under \$5.00	679	1,132	1,811	686	1,181	1,867
\$5.00 but under \$6.00	159	353	512	158	432	590
6.00 but under 7.00	282	232	514	275	249	524
7.00 but under 8.00	1,060	127	1,187	812	117	929
8.00 but under 9.00	1,011	52	1,063	1,160	46	1,206
9.00 but under 10.00	2,280	17	2,297	2,509	20	2,529
10.00 but under 12.00	2,485	24	2,509	2,718	25	2,743
12.00 but under 15.00	2,810	8	2,818	2,531	4	2,535
15.00 but under 20.00	1,587	3	1,590	1,473	3	1,476
20.00 and over	623	.....	623	732	.....	732
Total	12,976	1,948	14,924	13,054	2,077	15,131

Here is the first summary of table I. . This gives the number of persons in each class. In illustration of this may be given the figures for class "under \$5." For 1900 this class included, male, 679; female, 1,132; total, 1,811 persons. For 1901 it included, male, 686; female, 1,181; total, 1,867 persons. For each one of the other wage classes the number is given in the same way.

Of the 14,924 persons in 1900, 12,976 were male, 1,948 female; while of the 15,131 persons in 1901, 13,054 were male and 2,077 females.

The per cent relation which the number in each class bears to the totals is shown in the following table.

**PER CENT. OF PERSONS IN 12 INDUSTRIES RECEIVING CLASSIFIED
WEEKLY EARNINGS IN 1900 AND 1901.**

CLASSIFIED WEEKLY EARNINGS.	1900			1901		
	Male.	Female.	Total.	Male.	Female.	Total.
Under \$5.00	5.23	58.11	12.13	5.25	56.86	12.34
\$5.00 but under \$6.00	1.23	18.13	3.42	1.21	20.80	3.90
6.00 but under 7.00	2.17	11.91	3.44	2.11	11.99	3.47
7.00 but under 8.00	8.11	6.52	7.45	6.22	5.63	6.14
8.00 but under 9.00	7.79	2.67	7.12	8.89	2.22	7.97
9.00 but under 10.00	17.57	.87	15.49	19.22	.96	16.71
10.00 but under 12.00	19.15	1.23	16.82	20.82	1.20	18.12
12.00 but under 15.00	21.72	.41	18.88	19.39	.19	16.75
15.00 but under 20.00	12.23	.15	10.66	11.28	.15	9.76
20.00 and over	4.80	.....	4.18	5.61	.....	4.84
Total	100.00	100.00	100.00	100.00	100.00	100.00

This is the second summary table in order. It shows for all industries the per cent. of persons in each wage class.

The class "under \$5" had 5.23 per cent. of the males, 58.11 per cent. of the females, and 12.13 per cent. of the total of both in 1900, and in 1901 it included 5.25 per cent. of the males, 56.86 per cent. of the females and 12.34 per cent. of the total. The class \$10 but under \$12 had 16.82 per cent. of the total number in 1900, and 18.12 per cent. in 1901. These are only a few illustrations of what this table shows, but they are probably sufficient to convey a fairly complete idea of its importance.

The next summary deals with the proportion of male and female persons in each class.

PER CENT. OF MALE AND FEMALE PERSONS IN 12 INDUSTRIES RECEIVING CLASSIFIED WEEKLY EARNINGS, IN 1900 AND 1901.

CLASSIFIED WEEKLY EARNINGS.	1900			1901		
	Male.	Female.	Total.	Male.	Female.	Total.
Under \$5.00	37.49	62.51	100.00	36.74	63.26	100.00
\$5.00 but under \$6.00.....	31.05	68.95	100.00	26.78	73.22	100.00
6.00 but under 7.00.....	54.86	45.14	100.00	52.48	47.53	100.00
7.00 but under 8.00.....	89.30	10.70	100.00	87.41	12.59	100.00
8.00 but under 9.00.....	95.11	4.89	100.00	96.19	3.81	100.00
9.00 but under 10.00.....	99.26	.74	100.00	99.21	.79	100.00
10.00 but under 12.00.....	99.04	.96	100.00	99.09	.91	100.00
12.00 but under 15.00.....	99.72	.28	100.00	99.84	.16	100.00
15.00 but under 20.00.....	99.81	.19	100.00	99.80	.20	100.00
20.00 and over	100.00	.....	100.00	100.00	.....	100.00
Total	86.95	13.05	100.00	86.27	13.73	100.00

This is the third summary, and it deals with the per cent. of males and females. In class "under \$5" for example, 37.49 per cent. in 1900 were male and 62.51 per cent. were female. In 1901 the relation in the same class was males 36.74 per cent., females 63.26 per cent. In the next class in order the proportion of females is still greater. From this point through the higher classes the proportion of females were rapidly decreasing indicating that, comparatively speaking, they are the lowest in the wage scale.

Of the total number, 13.05 per cent. were females in 1900 and 13.73 per cent. in 1901. These figures would seem to indicate a small increase in this class of labor.

The following table is a sort of a summary of table II and shows, for all of the 12 industries for the two years, the number employed each month, together with the range of employment.

NUMBER OF PERSONS EMPLOYED, RANGE OF EMPLOYMENT—BY MONTHS.

MONTHS.	Total No. of Persons Employed in		Percentages of			
			Employment.		Unemployment.	
	1900.	1901.	1900.	1901.	1900.	1901.
January	12,040	12,665	87.35	87.81	12.65	12.19
February	12,164	12,761	88.25	88.47	11.75	11.53
March	12,508	12,747	90.74	88.37	9.26	11.63
April	12,741	12,945	92.43	89.75	7.57	10.25
May	13,403	13,639	97.24	94.56	2.76	5.44
June	13,425	13,836	97.40	95.92	2.60	4.08
July	13,448	13,986	97.56	96.96	2.44	3.04
August	13,577	14,198	98.50	98.43	1.50	1.57
September	13,559	14,342	98.37	99.43	1.63	.57
October	13,784	14,424	100.00	100.00		
November	13,401	14,363	97.22	99.58	2.78	.42
December	12,852	13,583	93.24	94.17	6.76	5.83
Average	13,075	13,624	94.86	94.45	5.14	5.55

For the 12 industries included, the above table shows the number employed each month, the average number, and the range of employment.

The greatest number of persons for any month was 13,784 in 1900 and 14,424 in 1901. In both cases the number is for the month of October. The smallest number was in January in both cases and for 1900 was 12,040 and for 1901, 12,665 persons. The difference between the greatest and smallest number thus amounted to 12.65 per cent. in the former year, and 12.19 per cent. in the latter. This difference was the range of unemployment in January. For the other months the range was narrower, for some in fact it amount to only a fraction of one per cent. The average range seems to have been 5.14 and 5.55 per cent. respectively for the two years.

The total amount paid as wages in 1900 and 1901 by each of the 12 industries as well as the total paid by all of them is shown in the above table. The amounts thus paid vary with the industry. Some paid more, others less. All except one, that of

fancy articles, paid more during the latter than the former year. The total for all was \$6,606,379.20 in 1900 and \$6,965,384.34 in 1901, or an increase for the latter year of \$359,005.14 or 5.43 per cent. The largest actual increase for any one industry was for railway shops, and the highest relative increase was in chemicals.

The average yearly earnings, as shown in table IV, for all industries were \$505.27 in 1900 and \$511.26 in 1901. This means that there was an increase for the latter year of \$5.99 or 1.19 per cent. As to the amount of this change it must be admitted that it was not very large. On the other hand it was in the right direction and indicates the tendency in this respect during the period.

In table V was seen for each industry the average number of days in operation each year. Of the 12 industries included 6 had their longest run in 1901, and 6 had it in 1900. On the whole, however, there was an increase for 1901 of one day, or from 298 to 299 days.

THE LEAD AND ZINC INDUSTRY OF SOUTHWESTERN WISCONSIN.*

The amount of lead and zinc ore which has been mined in southwestern Wisconsin during the last three quarters of a century within the borders of Grant, La Fayette and Iowa counties is not at all inconsiderable and yet a large number of people outside of the territory immediately surrounding these counties have yet to learn that such an industry exists within the borders of the state of Wisconsin; an industry which, if the facts furnish any criterion from which to judge, is at present only in the beginning of its development.

In the early days when trains commonly known as lead caravans and drawn by oxen, covered the route between Mineral Point and Milwaukee the people of the Metropolis no doubt appreciated the mineral resources of southwestern Wisconsin. In those days the only mineral mined was lead which was taken from openings within a few feet of the surface. Those areas which were early producers of mineral were abandoned by miners before the ore in sight was exhausted, owing to the supply of water. The reason for the abandoning of these productive areas was the prevailing idea that the downward extension of ore was very limited and therefore would not pay for machinery necessary to pump out the water. As a result of the surface mining which was done in early days the stranger is at once impressed by the surface appearance. Fields of twenty, thirty and forty acres of land are completely honeycombed by a vast number of depressions and elevations, the depressions varying from two to three feet to several feet in width. Many of these early-producing areas remain at present in the same condition in which they were abandoned forty or fifty years ago with the exception that erosion has been continually at work wearing

*Prepared by Eugene T. Hancock, University of Wisconsin.

down the elevations and filling up the depressions. A few of these areas, however, have been leveled down by the owners of the land in order that they might become better adapted for grazing and agricultural purposes. A very noticeable thing which never fails to attract the attention of the careful observer as he rides across the country in the matter in which these heavy-producing areas lie in an east and west direction.

It is not the purpose of this paper to enter upon a scientific treatment of this subject. It is to be purely of a popular nature, easily understood by the ordinary individual. If anyone wishes to acquaint himself with the actual relations of the lead and zinc ores and their association with other gangue minerals, such as calcite, barite, pyrite, etc., together with the broad, underlying principles which have controlled their segregation, I know of no better geological report than that of Moses Strong, published in 1877 in volume II of the *Geology of Wisconsin*. However, in order to present the subject in such a way as to make it more easily understood it will be necessary to mention the geological succession of the strata and state briefly the location and mode of occurrence of the ores.

The strata of sedimentary rock which form the geological series in southwestern Wisconsin were originally laid down by the water in an approximately horizontal position. Through subsequent earth movements the strata of rock have assumed an inclined position, dipping at quite an angle from northeast to southwest. Geologists have carefully worked out these formations and have found that they exist in the following order of succession: The uppermost member of the series is the Niagara limestone. This formation exists as a capping rock for the highest mounds of the region, e. g., at Sinsinawa Mound, located near Fairplay and only a short distance from the state line. The next formation is the Cincinnati group which underlies the Niagara limestone and also occurs only upon the higher mounds where the agents of erosion have not yet succeeded in wearing away the two upper formations and thereby exposing the underlying Galena limestone which is the prevailing surface rock in the lead region. This formation is by far the most important in respect to its metallic wealth of all which we have

to consider. It was in this formation that the surface mining was done in early days. In fact, the formation received its name from the abundance of lead sulphide, scientifically termed "Galena," which occurs within it. Wherever mining has been carried on in the underlying Trenton limestone, lead is usually present in the overlying Galena. These two formations constitute what is termed the Trenton division of the Lower Silurian formation. The Trenton limestone has a vertical thickness of about fifty feet, while the Galena has a varying thickness, depending upon the amount of surface denudation. These two formations have been the great producers of lead and zinc ore, the Galena limestone being especially productive of lead ore and the Trenton limestone containing mixtures of lead and zinc ores in varying proportions. Beneath the Trenton limestone lies the formation known as St. Peter's sandstone, which is about one hundred feet in thickness. This formation has been carefully examined to find if possible any indication of openings such as are characteristic of the Galena limestone. The only evidences to be found were occasional vertical fissures and seams. The fissures and seams were found, however, to contain no metallic matter, nor minerals and clay such as are found in veins and therefore probably have no connection with the vein system of the Galena limestone. Beneath the St. Peter's sandstone lies equally as thick a formation of Magnesian limestone, and beneath this occurs the deepest-lying formation of the region—the Potsdam sandstone.

The reader will recall to mind the statement having been made that while these formations were evidently laid down in approximately a horizontal position, subsequent earth movements had caused them to assume a position inclined at a considerable angle to the southwest. We have already learned that the metallic wealth of southwestern Wisconsin is confined to the two formations known as Galena and Trenton limestone, the base of which in the extreme southwestern part of the district lies over two hundred feet beneath the surface. Taking into account the location of the lead and zinc, together with the dip of the formation, we are naturally led to inquire whether or not these factors have not had an important influence in de-

termining the extent of the lead and zinc region. The answer is clearly in the affirmative, for while the Galena limestone is the prevailing surface formation throughout the lead region its lower limit approaches the surface nearer and nearer as we pass toward the north and finally gives way to the next lower formation—the Trenton limestone. The northern outcrop of the Galena formation conforms closely to, and lies a few feet north of, the main watershed which forms approximately the bed of the Lancaster branch of the Northwestern railroad, running from Madison to Lancaster Junction. Only a few miles north of this divide, where the Trenton limestone forms the surface rock, are found at Drybone and Highland, just as one would expect, large deposits of zinc carbonate, commonly termed dry bone. Passing north the surface gradually slopes down to the bed of the Wisconsin river, and the St. Peter's sandstone and finally the Magnesian limestone are the surface formations. The southern tributaries of the Wisconsin river, such as Otter Creek and Mill Creek, have their origin in the St. Peter's sandstone. A short distance below their source the streams have cut their way down into the Magnesian limestone, and as one passes down the streams the surface of this formation is seen higher and higher on the sides of the bluff until on reaching the Wisconsin river it forms the cap of all the bluffs from Sauk City to Boscobel, usually appearing as bold and rugged cliffs, lending a very picturesque effect to the scenery of the river. A vertical section drawn through the mining district of Beeton, Potosi and Fairplay, from the Mississippi river at the mouth of the Wisconsin river to the state line, shows very admirably the manner in which the rivers have cut their way down through the successive formations. The Mississippi river at Prairie du Chien reposes on the Lower Magnesian limestone. The bluff suddenly rises to a height of about six hundred feet, showing successively beds of Lower Magnesian limestone, St. Peter's sandstone, Trenton limestone and finally the capping Galena limestone. The formation gradually becomes thinner as one approaches the drainage basin near Sand creek where it forms a very thin layer upon the summits of the higher peaks. Passing this basin the Galena formation has a thick-

ness of from one hundred to two hundred feet and retains this thickness approximately until we reach the state line, with the exception of small areas in the valleys of creeks and rivers. Grant river, Pigeon Creek and Bois Creek, for example, have succeeded in eroding away the entire thickness of the Galena limestone, Trenton limestone and St. Peter's sandstone and are now resting upon the Lower Magnesian limestone. Platte river, although it has eroded its way through the first three formations, has not succeeded in cutting its way through the St. Peter's sandstone. Again, a vertical section drawn through the mining district from Hazel Green to Benton and Mineral Point and finally to the Wisconsin river presents a different appearance. More streams have taken part in the surface drainage but no individual stream has succeeded in eroding its way through the Trenton limestone with the exception of Peca-tonica, which reposes upon St. Peter's sandstone, and Sneeds Creek, which lies near the Wisconsin river. This stream and the Wisconsin river have their beds lower in the series than any of the other streams in the region. Even the Mississippi river at the mouth of the Wisconsin river lies upon Lower Magnesian limestone—the next higher formation in the series. These facts alone show that the dip of the formation must be considerable. Keeping in mind the different formations which have been the great producers of lead and zinc ore it is seen that in certain small areas, such as drainage basins, the entire ore-bearing formations have been eroded away while in other areas which constitute the greater part of the lead region the entire zinc-producing formation remains intact and there is superimposed upon this formation lead-producing Galena limestone varying in thickness from a few feet to two hundred feet.

In order to make this subject easily understood by those who are unfamiliar with some of the more common mining terms used in the lead region it will be necessary to define a few of these terms.

Range.—A range is a single or several parallel crevices containing useful ores or minerals. These crevices are seldom more than a few yards apart and may be vertical or only approximately so. In some cases these crevices are connected

by quartering ones but this is rather rare. The length of a range may vary from a few hundred feet to almost half a mile. The term range is also applied to horizontal bodies of ore, either one or several superimposed upon one another. They may or may not be separated by unproductive layers of rock.

Crevice.—This term denotes a fissure, vertical or approximately so, and only a few inches in width. On becoming narrower a crevice finally verges into what is called a seam. A crevice may or may not be filled with ore or minerals.

Openings.—These are of two kinds, vertical and horizontal. Vertical openings are simply crevice openings which are mere enlargements of the crevice in certain parts. They vary in width from a few inches to several feet. There are frequently several openings in the same vertical crevice, separated by layers of unproductive rock. Horizontal openings are large, irregular spaces between the strata. They vary in thickness from one to four feet and are often superimposed upon one another and separated by unproductive rock known as cap rock, the cap of one opening being frequently the floor of the one above it.

Sheet.—This is a term used to designate a solid body of ore exclusive of other minerals which may fill either a crevice or an opening. A sheet is said to pitch when it inclines considerably from the perpendicular.

Pockets.—These usually have reference to small, irregular cavities in the strata in which ore is frequently obtained.

Lode or Lead.—This term is generally applied to ore deposits found either in crevices or openings.

Drift.—This term denotes an underground gallery or roadway.

By keeping these terms clearly in mind the reader will better understand the following portion of this paper which bears chiefly upon the relation of the lead and zinc ores to these different forms of openings and also upon the different methods of mining in use in the lead region.

A careful study of the geology of the region has shown that the ores of lead and zinc occur in various ways. Probably the simplest and most common occurrence is in sheets. These

sheets comprise a body of ore seldom more than a few inches in thickness inclosed between two walls of limestone which remain approximately parallel from a few yards to several hundred feet. The body of ore may be approximately vertical or it may be inclined at a considerable angle. The vertical extent of the sheet is greater than that of any other form of deposit, sometimes amounting to more than one hundred feet. These sheets are often intersected by others of a similar character at right angles and in quartering directions. This intersection forms an opening which is larger and more productive. Sometimes a thin film of clay intervenes between the ore and wall rock, but more often the ore is attached directly to the walls. In many cases the inclined sheet forms a continuation of the horizontal opening and results in what miners commonly call flats and pitches. Of the forty different mines which have been reported on only three have been reported as have ore bodies of any other form than "flats and pitches." The miner follows the ore body for a short distance in a horizontal direction when suddenly its horizontal extension ceases and it begins to dip downward at an angle of about 45 degrees. He follows the ore body in this direction for a short distance when suddenly it changes its direction and again assumes a horizontal position. After the ore has been removed and the stranger enters the underground passage, he is immediately struck with the succession of flats and pitches formed by the underlying wall rock.

When lead ore occurs in openings it sometimes occurs attached to the wall rock and sometimes in loose masses mixed with earth, stone and ferruginous clay. This associated material can usually be removed without the aid of blasting. The openings are frequently so large as to be termed caves and often have their sides encrusted with large and well developed crystals of ore. Lead ore, scientifically termed "Galena," very frequently occurs in horizontal openings, in large, irregular bodies many feet in width, from a few inches to two or three feet in thickness, and often several hundred feet in length, associated with ores of zinc. The Galena is sometimes attached to the floor, sometimes to the roof and at other times near the middle of the opening. This mode of occurrence is confined

to the lower portion of the Galena limestone and to the underlying Trenton limestone. Galena often occurs in pockets which apparently have no connection whatever with crevices. They are simply irregular cavities, varying from a few inches to several feet in diameter, occurring at different places in the limestone where that formation seems to be exceptionally porous. When Galena occurs in pockets it is usually found as crystals attached to the wall rock. Besides occurring in various ways in rock cavities it sometimes occurs as float mineral scattered through the earth and clay near the surface of the ground. When galena occurs as float mineral it is usually distinguished by having the edges and angles of the crystals worn smooth and also by being partially decomposed on the surface and often covered by a white coating of lead carbonate.

We have already considered briefly the succession of the different formations and the mode of occurrence of the ores. We will now turn our attention to the methods of removing the ore. The occupation of mining in contrast with most other occupations always carries with it more or less uncertainty. Because of this fact the business man of ordinary means hesitates to invest in machinery sufficient to develop a property, although the existence of large bodies of ore is highly probable. Rather than invest a large amount of capital in an enterprise which very probably would yield a large income and yet in which there is a shade of uncertainty, the man of ordinary means prefers to invest very little capital and thereby receives an income much smaller in proportion. This fact, in the opinion of the writer, goes far to explain why the rich deposits of lead and zinc in southwestern Wisconsin have not been more fully developed. It explains why men preferred to use primitive methods of hoisting and separating ore for fifty or sixty years rather than adopt more modern and up-to-date methods. Notwithstanding this fact, however, a few mining companies controlled by practical men have taken a step forward, beginning a new era in mining activity in southwestern Wisconsin.

The apparatus for hoisting ore, pumping out the excess of water and also for separating the ore, which has been in use since the beginning of the industry, is substantially as follows:

If the amount of water is small it is usually removed by bailing into a large tub or barrel and hoisting it out with a windlass. If the amount of water is too great to be bailed a pump operated by horse power is often employed. In some cases what is called a horse pump and hoisting gin are combined and can be used together or separately as conditions may demand. In practice it is customary to construct the machine so that the hoisting drum can be disconnected from the pump, and vice versa, as it is seldom desirable to carry on both processes at the same time. The combined machine may be described as follows: It consists of a vertical shaft capable of being revolved. Near the bottom of this shaft is a bevel gear which meshes into a smaller gear attached to a shaft which by means of a simple mechanical apparatus operates the pump. Near the top of this vertical shaft is attached a drum around which is wrapped a rope in such a manner that each end passes over a separate pulley and down the shaft where it is attached to a bucket. A sweep is attached to the vertical shaft so that a horse, in walking, imparts to the drum a circular motion, and one bucket goes down the shaft while the other ascends. The load which a horse can raise, including ropes, buckets and the friction of the machinery, is as much greater than his own direct force as the diameter of his circuit is greater than that of the winding drum.

The methods commonly used for dressing and separating ores is described in Vol. I of the Geology of Wisconsin very clearly and concisely as follows: "The ores of lead and zinc as they arrive at the surface are sometimes clean and pure in large masses and ready for market, but more frequently they have to undergo certain operations of dressing and cleaning. Lead ore in small pieces usually comes from the mine mixed with considerable clay and "wash dirt." It is cleaned by washing as follows: A long box about nine inches deep and open on the top and at the lower end, is set in the ground at a moderate slope and a stream of water is conducted into it over the head board at the upper end. The ore to be washed is placed in the extremity so that the water falls upon it. The operation is completed by the miner shoveling the ore against the stream until all foreign substances are removed. Frequently, however, a simple

washing does not suffice for the preparation of ore, especially if more than one kind of ore is present in the mass or if the ore is mixed with rock, or vein material. In such cases it is customary to prepare and separate the ore by crushing and jigging. The crushing is effected either by a rock breaking machine such as "Blake's rock breaker," or by passing it through a pair of rollers operated by horse power. It is then washed and screened, the coarser portion recrushed; and the operation of cleaning and separation concludes with jigging, which is effected by the contrivance described as follows: The jig used in the lead region consists usually of the following parts: an exterior deep box filled with water and an interior shallow box in which the ore is placed, the bottom of which consists usually of an iron plate pierced with fine holes to permit the passage of water through the mass. The box is connected with a long lever arm, at the end of which the workman places himself, being able to reach it standing on his toes, with his arms extended above his head. By alternately rising and falling on his feet he produces a slight vertical movement of the interior box and its contents. The contents of the inner box being suspended in water and agitated immediately undergo a change of position, resulting in the deposition of the heaviest material at the bottom of the box and the lightest, such as stone, at the top. After a short agitation the inner box is raised from the water by depressing and fastening the lever and the materials are removed. At the close of the operation the water is drawn off from the outer box through the plug and the fine ore, which may have passed the sieve, is collected at the bottom of the box. . . .

. . . The fall of bodies in water, on which the action of the machine depends, is governed first, by specific gravity, and second, by the relative size of the pieces, the large pieces falling with the greatest rapidity because the resisting surface is less in proportion to their weight. Therefore, when the materials to be separated are placed in the jig without sufficient previous classification, according to size, the separation cannot be perfect. If, however, the material is first separated by sieves of various sizes and each size treated by itself in the jig, the separation is much more perfect, as they then arrange themselves

according to their different specific gravities." Various different modifications of these simple devices for raising and separating ore have been in use in the mining district, but these serve to illustrate the primitive methods which have been in use.

In Volume II of the Geology of Wisconsin, published in 1877, with T. C. Chamberlain as chief geologist, may be found a detailed account of the different ranges, mines and diggings located in the different mining districts of the lead region, together with a statistical report of the amount of lead and zinc ore produced in each district. The production of zinc ore from 1860 to 1876 was determined, and also that of lead ore from 1862 to 1876. The use of zinc ore in the Wisconsin district began in 1860. The amount of zinc ore, therefore, could be obtained from the smelting furnaces and ascertained with a great degree of accuracy. The production of lead ore, however, even at that early date could only be ascertained approximately. Owing to the changeable character of the industry and the failure on the part of mine owners to keep and preserve records of the different properties, only a fair estimate could be obtained in many cases. However, a great deal of care was taken in the preparation of that report, and it is, therefore, a fairly accurate statement of the amount of ore mined in southwestern Wisconsin between the dates previously referred to.

In the absence of any definite information relating to the output since 1876, the purpose of the writer has been to ascertain as accurately as the limited time would permit, the condition of the mining industry since 1876, and how the production of ore compares with the production prior to that date. The information has been procured in many cases under difficulties owing to the failure to keep and preserve records, and in a few cases to the failure of mine owners to grant the desired information.

Notwithstanding these difficulties it is to be hoped that those who are interested in this great industry may be benefited by the results obtained, which are based upon reports of mine owners, smelting furnaces and railroad companies. Notwithstanding the very limited time allotted for the completion of this paper considerable care has been exercised in order to ascertain the

names of all parties operating mines in the lead region. Each party, so far as ascertained, has been given an opportunity of reporting the condition of his mine from the standpoint of duration, amount of ore produced, number of men employed, etc. There are, no doubt, a few of the smaller mines located near the outskirts of the district, concerning which the writer has not been able to gather information. There are also a few others which have not been reported owing to failure on the part of mine owners to comply with our request. Upon the whole, however, the facts already gathered will serve as a basis from which one may get a fairly accurate idea of the importance of the lead and zinc industry in southwestern Wisconsin.

Between forty and fifty mines have been reported as being operated at the present time. Of those reported, 12 per cent. were opened up as early as 1840. New mines were gradually opened up in various parts of the district between 1840 and 1890, but the period of greatest activity in mining is included between 1890 and 1902. The reports show that about one-third of the mines now operated had their beginning during this period. These mines which began operation during this period have been operated almost continuously and are among the best producers of the region. There are occasionally mines which have been worked almost continuously for fifty or sixty years, but instances of this kind are very rare. In most instances the older diggings have been worked off and on during a number of years and later discontinued for various reasons and again renewed under more favorable conditions and perhaps under different management. It is this intermittent character of the mines, together with the failure to preserve and transmit a record of the output which makes it absolutely impossible to ascertain more than approximately what the output has been during the last quarter of a century. Even a fair estimate would be impossible if one were compelled to rely solely upon the statements of mine owners. Fortunately there are methods of obtaining more exact information, which have been employed, and which will be mentioned later on in this paper.

The number of men employed in the different mines depends manifestly upon the extent to which the work is being carried

on. In some of the smaller diggings, which are being worked only a portion of the year, for example, during the winter when agricultural pursuits are impossible, only three or four men are employed. In some of the larger mines, on the other hand, which are controlled by incorporated companies which have purchased modern machinery for hoisting and separating the ore, from thirty-five to fifty men are employed, and the mines are worked night and day. The changeable character of the mines makes it difficult to determine the average number of men actually employed in the lead and zinc region. Judging from reports of mine owners, however, there are at present no less than six hundred men employed in mining lead and zinc ore in southwestern Wisconsin. If every individual engaged in mining during a portion of the year was taken into account and the number determined exactly, I have no doubt that it would greatly exceed that number. At all events it is an industry which demands the attention of the people of the state and deserves all the assistance that can be given by the Wisconsin legislature in the way of promoting its development.

The depth to which the different mines are being worked varies very greatly. In a few cases lead and zinc ores are being removed at a depth of thirty feet. This, however, represents an extreme case. In most instances the depth of working varies from 75 feet to 150 feet, and in a few mines the ore is being hoisted from a depth of two hundred feet.

The manner of removing the ore depends largely upon topographical conditions. In a few instances where the topography is rough the ore is removed by merely tunneling into the side of the hill. In most of the mines, however, it has been necessary to employ some kind of hoisting apparatus. A large majority of the mines are still using very primitive apparatus for hoisting, pumping, and separating the ore, such as that already described. Mining companies are seeing the necessity of machinery of great efficiency, however, and are rapidly replacing primitive machinery by steam and gasoline engines and suitable machinery for pumping out the excess of water and hoisting the ore. At least 25% of the mines of any importance have already been provided with steam or gasoline engines,

either for hoisting or pumping, or both combined. A small number of the mines have already been provided with steam crushing machinery, and in very few instances magnetic separators are being used. Although such machinery is only rarely in use, other mining companies have signified their intentions of introducing more efficient machinery in the near future. It will not be long, therefore, before the metallic wealth of southwestern Wisconsin will be developed in such a manner as to show its real importance among the different resources of the state.

In order that the average reader may form a clear idea of the machinery which is being used in some of the most modern equipped mines of the lead and zinc district the apparatus will be described in detail. It must be remembered, however, that a modern equipped mine does not mean an especially rich deposit of ore. The most primitive kind of machinery may be operated above the richest deposit of ore. The reason the following mines were chosen are three in number: (1) Because they are about as well equipped as any others in the district; (2) because they represent separate mining districts, and (3) because the owners have very kindly furnished us with accurate and complete reports concerning them.

The Empire Mine.—This mine is located in the eastern part of the city of Platteville. It is practically a new mine. The machinery was first put in operation April 13, 1899. It is operated by the Platteville Lead and Zinc Co. The machinery in operation at this mine includes a 22 horse power gasoline engine, a Ledwood hoister, and a 16-inch Cornish pump. The fan is revolved at 1,700 revolutions per minute to force air into the pipe. On March 15, 1902, this company had contracted for a \$6,000 mill, to be in running order June 1, 1902. During the winter of 1901 and 1902 there were 35 men employed, with a pay roll of \$800 per month. During the coming summer there were to be 50 or more men employed. The entire force is composed of one shift per day of eight hours.

Trego Mine, No. 1.—This mine is situated about four miles east of Cuba City and has been controlled by the Trego Mining Company for about a year and a half. For about six years

prior to November 1, 1900 this mine was worked in the regular old-fashioned manner and the output was small. The plant, which had already been erected May 3, 1902, is valued at \$25,000. The ore is hoisted by means of steel ore cars, which are conveyed to the surface by a regular mining cage or elevator. These cars are dumped into the mill, which handles about 200 tons of ore in nine hours, producing about forty tons of zinc blende and iron pyrites mixed. This product is then roasted to render the iron pyrites magnetic, passed through electric separating machines, which bring the magnetic iron into the field of electro magnets to which it is immediately attracted and thus removed from the ore. This plant is unique in character and well adapted to the treatment of ore, bearing a considerable percentage of iron pyrites. The working force comprises 60 men in each 24 hours, who handle about 200 tons of material and produce about 75 to 100 tons of finished zinc blende per week.

The foregoing facts concerning only two of a considerable number of what may be termed well-equipped mines, serve to show the recent tendency toward a more rapid development of the lead and zinc industry.

In the preparation of this paper the aim has been to ascertain as accurately as possible the output for the entire district. The lack of continuity, however, in the operation of many of the mines, together with the failure to keep and preserve records, show clearly that an estimate based entirely upon the reports of mine owners must be very unsatisfactory. While these reports have been of great value for the collection of other data, they have been of little service from the standpoint of the amount of lead and zinc ore produced at the present time. The difficulty has been overcome, however, through the assistance of the different railroad companies which have in the past transported ore from the various shipping stations in the district. Reports furnished by the auditors of the different companies show very accurately the amount of ore taken from shipping stations during the period from June 30, 1896, to March 31, 1902. According to these reports, 287,891,333 pounds of lead and zinc ore were shipped from the Wisconsin district by the Illinois

Central Railroad Co., the Chicago & Northwestern Railroad Co., and the Chicago, Milwaukee & St. Paul Railroad Co. during that period. This amount of ore, combined with a small quantity which is hauled by team and smelted within the district, chiefly by the Mineral Point Zinc Co., represents quite accurately the entire amount of lead and zinc ore mined within the lead and zinc region of southwestern Wisconsin during the last five years and nine months.

The following smelters have been in the market for Wisconsin zinc ores at one time or another:

The Illinois Zinc Co., Peru, Ill.

The Wenona Zinc Co., Wenona, Ill.

The Mineral Point Zinc Co., Mineral Point, Wis.

The Waukegan Zinc Co., Waukegan, Ill.

The Sandoval Zinc Co., Sandoval, Ill.

The Ingalls Zinc Co., Ingalls, Ind.

Page, Krauss & Co., St. Louis, Mo.

The Matthiessin & Hegeler Zinc Co., La Salle, Ill.

Owing to the failure on the part of some of these companies to furnish us a complete statement of the amount of zinc ore smelted by them, no attempt will be made to determine the separate amounts of lead and zinc ore produced in the lead and zinc district. We feel greatly indebted, however, to most of these companies for the excellent reports which they have furnished, and take the liberty of publishing them in order that the reader may form his own estimate:

Wenona Zinc Co.—This plant began operations in 1892, and has been operated about six years. The ore used largely comes from Missouri. The estimate of Wisconsin ore used is as follows:

1892	900 tons.
1893	out.
1894	out.
1895	out.
1896	out.
1897	out.
1898	900 tons.
1899	900 tons.
1900	900 tons.
1901	1,200 tons.
1902 to April 26	600 tons.

Mineral Point Zinc Co.—The amount of Wisconsin ore smelted by the Mineral Point Zinc Co. is as follows:

	Tons.
1896	10,300
1897	9,740
1898	11,400
1899	12,199
1900	10,977
1901	14,200

Waukegan Zinc Co.—This plant began operations at North Chicago, formerly called South Waukegan, in June, 1895. The consumption of Wisconsin ores up to April 30, 1902, is as follows:

1895	200 tons
1896	593.69 net tons
1897	1,491.5 net tons
1898	2,843.91 net tons
1899	529.375 net tons
1900	1,035.05 net tons
1901	1,192.578 net tons
1902 to Apr. 30	463.873 net tons

Page & Krauss.—The amount of Wisconsin ore purchased annually by this company is estimated at 2,500 tons.

Matthiessen & Hegeler Zinc Co.—The amount of Wisconsin zinc ore purchased by this company from 1876 to 1901 is as follows:

	Calamine, tons.	Blede, tons.
1876	1,849	3,180
1877	916	3,539
1878	977	3,554
1879	2,593	4,191
1880	2,079	2,418
1881	3,320	2,243
1882	4,465	2,201
1883	6,880	3,604
1884	6,197	3,151
1885	3,812	3,637
1886	4,706	3,459
1887	2,839	3,330
1888	3,699	3,308
1889	6,314	2,630
1890	4,922	4,471
1891	1,620	4,160
1892	5	3,760
1893		3,727
1894		3,633
1895		3,544
1896		2,809
1897		2,803
1898		2,885
1899		2,324
1900		1,230
1901		2,427

Manifestly the most reliable source of information in the determination of the aggregate output of the district is the reports of the different railroad companies. Their reports show that during the five years and nine months from June 3, 1896, to March 31, 1902, the total output greatly exceeded 287,891,533 pounds of ore and would, no doubt, reach 300,000,000 pounds. The report of Moses Strong, published in Vol. II, of the Geology of Wisconsin, shows the total production of lead and zinc ore, from 1860 to 1876, to have been 445,364,933 pounds. In comparing these amounts we find that the amount of lead and zinc ore mined in southwestern Wisconsin during the five years and nine months prior to March 31, 1902, equalled 67 per cent. of the total output for the sixteen years prior to 1876.

In the treatment of the subject matter contained in this paper it has been necessary to be as brief as possible. The aim has been, however, to mention some of the most important facts bearing upon the subject and to so arrange them that they may appeal to the average reader. If, after reading its contents, he has a more definite idea of the geology of the region and the way in which scientific research has aided in the development of our resources, together with a more definite idea of the occurrence of ores, the methods of treating them, and finally the importance of this industry among the others of the state, the author's purpose will have been fully accomplished.

PART X.

Factory Inspection.

The work embraced under the term Factory Inspection may be said to consist of enforcing the laws which regulate the conditions in factories, workshops and many other places where the safety of individuals or the public at large require such regulations. The actual work of enforcing these laws is performed by the factory inspectors. Briefly speaking, the duties of the inspectors in this respect consist of visiting each place embraced by the so called factory laws, and through an inspection of the same, ascertain whether the conditions there meet the requirements of the law. When violations are discovered they must go still further. It is their duty to see that all such violations are corrected. To this end they are even authorized to institute and maintain prosecutions before the courts. The inspectors must also report in full to this Bureau upon the condition of all places inspected, and show in detail all other acts performed by them in their official capacity.

The so called factory laws, which it is our duty to enforce, cover a good deal of ground. In a general way it can be said that they relate to the safety and comfort of those who are employed in factories and shops, and to the safety in other public or semi-public buildings. The provisions, however, are so numerous that they cannot possibly be given here in detail.

A fairly good idea of the nature and extent of this work may be had from the following statement, which is a part of the general instructions to the inspectors:

The duties of the inspectors consist mainly of enforcing the so-called factory laws; that is, the laws which regulate the condition of employment in factories and workshops, including places where cigars, cigarettes and garments or wearing apparel of all kinds are made; building operations, mercantile establishments, offices, summer or beer gardens, bowling alleys and other places; also the laws which require fire escapes, outward swinging doors and other safety appliances on public buildings, such as hotels, tenement houses, boarding houses, school houses, opera houses, assembly halls, office buildings, hospitals, churches, etc.

The laws in question will be found in the Wisconsin statutes of 1898 and in the session laws of 1899 and 1901. They have also been compiled in a pamphlet of convenient form, fully indexed, for the use of the inspectors. Each inspector is required to be thoroughly informed as to these laws as a necessary preparation for his duties.

In order to enforce these laws and to prevent their violation, frequent inspections are necessary; that is, the inspectors must visit the different places and thoroughly examine every part and condition that comes within the laws and pertains to the safety of those who are employed in or live there, as well as of the public in general. Each place should be inspected as often as possible. It is especially necessary to give the closest attention to places where women and children are employed.

The inspectors are provided with blank reports, one of which must be filled out at the time of inspection for each building or place inspected. A copy of all such reports must be forwarded daily or weekly to the commissioner of labor at Madison. In addition to this the inspectors must also make weekly reports upon their work on a special blank which is provided for that purpose. Daily or weekly reports are absolutely necessary to effective work, not only on the part of the inspectors, but in the office.

In filling out the reports certain rules should be observed. For instance, when for obvious reasons no answer to a question in the blanks is necessary or can be had, the blank space should be filled in with a line, thus,

answer is required or appropriate, it should be given even if an answer to the same effect has been given in another part of the blank.

Where personal examination as to any question appearing on the blanks will determine the facts, such examination is expected to be made. It is not the policy of the law to rely upon employers' statements that no employees are under the age of 14 years; that a register is kept of names, ages, and addresses of those under 16; that minors are physically fit for work; that minors have filed affidavits or permits; that fire escapes have balconies attached; that proper hose attachments are provided; that doors swing out or that the windows or floors are of certain dimensions. These are given only as illustrations. There are, of course, certain questions propounded on the blanks that can be answered only by the employer (the truth of which can not be detected by an examination however rigid), but all other answers are expected to be those of the inspector and to result from actual and thorough inspection.

Answers to inquiries relating to the size of rooms or windows should be given accurately after you have personally taken the measurements, as such answers will be used to ascertain the number of square feet of space that is allowed to each employee, the number of cubic feet in the room, the percentage of window area to floor space, etc. Measurements taken at previous inspections or furnished by the occupant of the premises should not be relied upon.

It is very important to have answers to a set of questions consistent with each other. The inquiries may appear unimportant, but each one has a definite object, and careless answers make the report more or less valueless.

The answers should be brief, of course, but still should be complete enough to disclose the situation. The files of the Bureau furnish abundant examples of incomplete answers. One will illustrate: The question appearing upon the blank was—"Number of doors in each case which swing out, slide or swing in?" The answer filled in this question read, "In," showing that the inspector failed to comprehend the full scope of the question.

It will be noticed that the blanks which are intended for reports for inspection vary considerably. There are several reasons for this. In the first place, buildings of nearly all classes are included, and these vary both in construction and purpose for which they are used. Then again, there is a great difference between the nature and number of the provisions by which the different places are affected. A factory, for instance, differs greatly from a mercantile establishment and is affected by more and different provisions.

For these and other reasons it was necessary to classify the places to be inspected with reference to the kind of buildings used and the business carried on in them as according to the provisions in the laws by which they are affected, and also to prepare a separate set of blanks for each of these classes. It will also be noticed that the questions in each blank are so framed and arranged that the answers to them, if carefully made, will necessarily show the condition of the building, or place to which they apply.

By the word "factory" is generally meant a larger shop or one which is driven or operated by mechanical power, and by work shop, as usually understood, a smaller shop where hand labor predominates. As to the blanks for these two classes of places, the one intended for the former is larger and more complete than the one for the smaller shops. This distinction between factory and work shop, however, is difficult to maintain in actual practice. So much depends upon the location and surrounding circumstances, that no distinct line can in every case be drawn for the purposes of inspection. As between other places, such as hotels, opera houses, etc., the distinction is usually more clearly defined, though in some cases even here the facts are such that it is hard to tell just how to classify them.

One blank inspection report should be filled out for each building inspected, regardless of ownership or whether used in connection with other buildings or not. In this connection it should be noticed that the blank to be used for reporting upon factories is divided into two parts, and that the questions in the first of these, or part I, are such that the answers must cover the business of the firm as a whole, no matter how large the firm

is and how many buildings it occupies, while the questions in part II relate to the condition or facts in one particular building only. This should be borne in mind especially, because it will tend to save labor. For firms having more than one building and for which therefore more than one blank must be used, it will not be necessary to fill out or use part I, except in one of the blanks. This, as said, for the reason that part I relates to the whole plant, while part II relates to one of the buildings only.

As emphasized already, the inspection should be personal and thorough. Mere statements as to the condition of interested parties are seldom reliable, and therefore not wanted. In all cases where irregularities or violations of the law are met with, the inspector should make a close investigation of the same, and as soon as he has learned the real situation, he should take the matter up directly with the proprietor or superintendent in charge and with him talk over and suggest the necessary changes. To come to a clear and definite understanding as to what ought to be done while on the ground is always indispensable to effective work. A good, frank and open talk between the inspector and party in charge also leads to much better feeling on the part of both sides and establishes a confidence that otherwise is apt to be lacking.

As soon as possible after the inspection, the inspector should also mail to each firm where violations have been made a statement showing in detail all such violations and request that the necessary improvements be made. Such statements are usually called orders. They are also required by law and can be made on a blank provided for that purpose.

All violations of the law should also be reported to this Bureau on the inspection blank filled out for the building where they were discovered. Appropriate space in the blank is provided for this purpose, either immediately after each set of questions, as in the case of factory inspection blank, or at the bottom, as in the case of most of the other blanks. All actions taken by the inspectors should be reported to the Bureau in the place designated for this purpose.

In order to be able to properly perform their duties and thus

be of some value to the state, it is absolutely necessary that the inspectors should be interested in their work and that they should study it closely. Their duties are not those of a police officer only, but are largely of a reformatory character. Not only must they be fully familiar with the laws they are charged to enforce, but they must know how to enforce them wisely. A good inspector must know all about the latest and best methods of guarding dangerous machinery, the most effective methods of sanitation, the kind of fire escapes, etc., which best serves the purpose, how to find, with the least amount of friction and delay, those children that are illegally employed, even though they claim to be old enough and may have papers to that effect.

These are only a few illustrations of what is required of the inspectors. The inspectors to be successful, must be able to enter upon their work in the right spirit, must have good judgment and know how to get on with men. They must be so familiar with the law and with what is to be done when the laws are violated, that their position in this respect will be above criticism. Those who operate or manage factories and with whom the inspectors must deal, are experts in such matters, and unless the inspectors know as much or are fully competent, they are immediately at a disadvantage, if not made to appear ridiculous.

The inspectors should be firm and courteous, as well as well informed. Cases where they must show authority, in order to carry out the purposes of the law, are met with now and then, but, unless provoked by the conduct or incompetency on the part of the inspectors, such cases are the exception rather than the rule.

The inspectors are officers of the Bureau of Labor and Industrial Statistics. This Bureau is charged with many duties besides enforcing the factory laws and in which the inspectors may have to assist. For instance, they may be called upon by the Bureau to gather statistics and other facts. Under the law it is also the duty of the inspectors in Milwaukee to assist the superintendent of the Free Employment Bureau in his work.

All work performed by the inspectors in the line of their

duties must be reported to the Bureau either on blanks prepared for this purpose or by letter.

When in doubt as to the course to take, or confronted with questions which they do not like to decide upon their own responsibility, the inspectors should immediately put themselves in communication with the Bureau.

The following blanks are among the most important of those which will be used by the inspectors.

Form No. I will be used in the inspection of factories. This blank covers eight pages and is divided into two parts. The first of these, or part I, relates to the plant as a whole, regardless of the number of buildings occupied by it. The second part, or part II, is intended for one building only; that is, one copy of part II will be filled out for each building—not plant—inspected.

Form No. II is intended for workshops only, or smaller shops, which can not properly be classed as factories. As stated above the distinction between factories and workshops is not very definite and therefore largely one of judgment. In a general way it can be said that establishments which employ steam or other mechanical power as motive power should be classed as factories.

Form No. III should be used in the inspection of cigar factories, or places where cigars, cigarettes, etc., are made. These places are affected by the factory laws in general, especially by Chapter 79 of the Laws of 1899 and Chapter 239 of the Laws of 1901.

Form No. IV is intended for "sweat shops" or places where garments or wearing apparel of all kinds are manufactured. This blank will not have to be used to any great extent outside of Milwaukee.

Form No. V will be used in the inspection of hotels, lodging, boarding and tenement houses.

Form No. VI should be used in reporting upon opera houses, halls, schools, offices, storage, churches, hospitals and other public buildings.

Form No. VII is intended for use in inspection and report-

ing upon mercantile establishments or department stores, wholesale houses, etc.

Form No. VIII will be used when reporting upon the condition in building operations or places of work where buildings are either constructed, altered or repaired. (See Chapter 280, Laws of 1901.)

Forms III, IV, V, VI, and VII, respectively, are stitched together into packages, each one of which contains 10 blank reports. This was done for the sake of convenience only. It does not mean that those in each package should be kept together after being completed unless it is convenient to do so. Blanks which are completed can be torn off and sent in at any time during the week.

The blank form for *Orders for Changes* is also stitched. This form should in all cases be made out in duplicate, one for the party to whom made and one to be kept by the inspector until ordered in by the bureau. The part to be sent out is perforated and can thus be easily separated from that to be kept on file.

In filling out these orders, the labor of writing out the extra copy may be saved by the use of a carbon to be inserted between the leaves.

There is also a *blank form for weekly reports* of all the work done. This should be made out at the end of each week and immediately forwarded to the bureau. This blank should show in appropriate places for each day during the week the number of places or buildings inspected, the number of orders issued and suggestions made, and all other duties performed by the inspectors. Detailed directions as to the use of this blank will be found on the first page of the same.

In these instructions is found what is expected of the inspectors, and this in turn certainly throws a great deal of light upon the nature of their duties or the work as a whole. The reports of the inspectors upon factories must show the number and of the buildings occupied, the number of persons employed, the number of boilers and amount and kind of power used. These facts are of value chiefly for statistical purposes. Then again, they must show the condition of the buildings, the number and

condition of the fire escapes, standpipes, stairways, elevators and hoists, signals, machinery requiring protection, polishing wheels, vats, doors, seats for women, and the sanitary condition in general. They are also inquiring about the number of children employed, the number of accidents that have occurred within a specified time, and the hours of labor. The reports must also show what action was taken when any of these things were in such condition as to render the situation unsafe or dangerous, or, when children under the legal age were found. This is only a part of what the inspectors have to look after in the factories alone but it helps to illustrate what was said in the instructions.

The facts thus reported by the inspectors were compiled in the bureau, and some of the more important results obtained from this are presented in the following pages:

The first table in order shows in detail, by cities and towns, the name, business, number of buildings occupied, number of persons employed, number of boilers, and amount of power used by each establishment inspected, outside of cigar factories and shops where garments are made. As this includes the detailed record of 3,059 establishments it must of necessity occupy a great deal of space. In fact it covers the greater proportion of this part of the report. The facts it contains, however, are of considerable value, amounting practically to a directory of the manufacturing establishments in this state. By this is not meant that it includes the name, etc., of every shop in the state where articles are made or repaired, for this it does not. But it is a fairly complete list of the more important plants, and in many cases will be found to be of great value.

The second table in order is a summary of the first, or the one that precedes it. It shows for each city or place of location the total number of establishments, buildings, persons employed, boilers, and power used. This table includes 242 places, and, by showing the relative importance of each, will be found interesting.

The third table in order shows the total by industries. The establishments included in the first table were classified by industries as well as by cities and the totals for each industry ob-

tained. These totals, as said, are given in the third table. The table includes 71 industries and is interesting from several points of view.

Besides the three tables thus described this part also includes many other facts which were compiled from the reports of the inspectors. Thus the totals for the cigar factories have been briefly analyzed. Considerable space has been given to a more complete analysis of the reports of 2,895 of the establishments which are included in the above three tables. And a few pages have been devoted to a summary of the work of the inspectors.

ESTABLISHMENTS INSPECTED.

NAME.	BUSINESS.	BUILDINGS.		EMPLOYERS.			BOILERS.			
		Under 3 stories.	3 or more stories.	Male.	Female.	Total.	Under 16 yrs. of age.	Num- ber.	Total horse power.	
APPLETON.										
Appleton Brewing & Malting Co.	Brewery	1		14		14		2	100	
Appleton Chair Co.	Chairs	1	1	80	3	83	18	2	136	
Appleton Crescent	Publisher	1		8	3	11	1	1	5	
Appleton Electric Laundry	Laundry	1		4	4	8		3	44	
Appleton Electric Power Co.	Light	1		3		3		3	1	
Appleton Hay Tool Co.	Hay Forks	1		2		2		2	1	
Appleton Knitting Co.	Knit Goods	1		7	35	42		1	1	
Appleton Machine Co.	Machinery	2		60		60		1	1	
Appleton Paper Box Factory	Paper Boxes	1		1	8	9		2	1	
Appleton Pickle and Preserving Co.	Pickles	1		2		2		2	1	
Appleton Paper & Pulp Co.	Pulp	1		15		15		1	10	
Appleton Screen Plate Co.	Screen Plates	1		17	3	20		1	1	
Appleton Shirt & Pants Co.	Clothing	1		6	13	19		1	10	
Appleton Steam Laundry	Laundry	1		3	8	11		1	20	
Appleton Toy & Furniture Co.	Toys, etc.	1		45	1	46	23	1	1	
Appleton Volksfreund	Publishers	4		12		12		2	200	
Appleton Water Works Co.	Water	1		4		4		2	60	
Appleton Weeker	Publishers	1		4	1	5		2	225	
Appleton Wire Works	Wire Cloth	1		39	6	45		1	10	
Appleton Woolen Mills	Felt and Yarn	2		27	39	66	4	2	225	
Atlas Paper Co.	Paper	1	1	54	16	70		2	10	
Baldt, Martin	Fixtures	1		3		3		1	1	
Bagle Mfg. Co.	Feed Cutters, etc.	1		14		14		1	1	
Fairbanks & Timm	Machinery	1		7		7		1	1	
Fox River Screen Plate Co.	Screen Plates	1		3		3		1	1	
Fox River Paper Co.	Paper	3	3	144	156	300		9	1,275	
Inter Lake Paper & Pulp Co.	Pulp	8	1	125		125	6	5	1,125	
Kimberly & Clark Co.	Pulp	2	2	84	11	95		8	1,000	
Kurz & Root	Elect. Goods	1		7		7		1	1	
Lake Superior Knitting Works	Knit Goods	1	1	15	18	33	2	1	1	
Marston, J. H.	Hubs and Spokes	2		16		16		1	100	
Mausser, Renner & Graef	Flour	2		18		18		1	1	
McMurry Packing Co.	Canning	3		49	26	75		4	400	
Post Binding Co.	Blindry	1		3	3	6		4	400	

* = Electric; † = Water; ‡ = Gas; § = Hand; ** = Leased.

ESTABLISHMENTS INSPECTED.

NAME.	BUSINESS.	BUILDINGS.		EMPLOYES.		BOILERS.			
		Under 3 stories.	3 or more stories.	Male.	Fe- male.	Total.	Under 16 yrs. of age.	Num- ber.	Total horse power.
APPLETON—Continued.									
Post Publishing Co.	Publishers	1		10		10			*
Patten Paper Co.	Paper	2		73	30	103		6	700
Riverside Fibre Co.	Pulp		1	120		120	1	7	1,200
Schroeder, Paul	Marble	1		7		7			35
Speeding, A.	Carding Wool	1		3				1	1,000
Tellulah Paper Co.	Paper	3	1	74	41	115		6	*
The Atlas Car Mover Co.	Car Moving	2		2		2		1	120
The Standard Mfg. Co.	Sash, etc.	2		20		20	1		17
Valley Iron Works	Machines	1		64	1	65		2	160
Walter, Geo., Estate	Brewery		1	16		16			7
Webster, W. M., & Son	Planing	1		3		3		2	280
Wiley Co.	Flour	1	1	12		12		2	235
Wis. Malt & Grain Co.	Malt	2	1	25		25		1	150
Wis. Tissue Paper Co.	Paper	1		16	6	22		1	40
Wis. Wire Works	Wire	2		10	2	12		1	
Total		60	16	1,340	430	1,770	102	76	9,069
ASHLAND.									
Ashland Brewing Co.	Brewery	2		15	1	16		2	85
Ashland Iron and Steel Co.	Pig Iron	12		150		150	1	10	1,200
Ashland Light, Power & Street Ry. Co.	Power and Light	1		25		25		4	500
Ashland Lumber Co.	Lumber	1		125		125		5	300
Ashland News	Publishing	1		7	3	10		7	*
Ashland Press	Publishing	1		16		16		*	
Ashland Steam Laundry	Laundry	1		3		3		1	35
Ashland Sulphite Fibre Co.	Sulphite Fiber	1	1	49	12	61	4	4	400
Ashland Water Works	Water	1		6		6		3	500
Ashland Wood Working Co.	Woodwork	1		5		5		*	
Barker & Stewart	Lumber	1		200		200		5	400
Bowron, A. W.	Printing		1	3		3		2	100
Bretting & Co.	Machinists	6		44	1	45		7	*
Chequamegon Critic	Publishing		1	2		2		3	
Chequamegon Ice Co.	Wood and Coal	1		40		40			*
Chicago & N. W. Ry. Ore Dock	Ore Dock	2		125		125			*

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Chicago & N. W. Ry. Shops	Repairs	3	75	24	10	1	75
Cole Bros.	Coal and Wood	1	24	7	10	1	1
Domestic Laundry	Laundry	1	2	5	10	1	12
Durfee, W. R.	Lumber	1	110	140	140	1	500
East End Mill (Nestor Estate)	Machine	1	140	4	4	1	500
Fahrig, H. C.	Machinery, etc.	1	4	40	4	1	10
Jones & Adams Co., The	Coal Dock	1	40	175	175	1	150
Keystone Lumber Co.	Lumber	1	175	5	5	9	1,000
Kimble, Julius	Wood Work	1	5	70	70	1	60
Lake Superior Lumber Co.	Saw Mill	1	70	25	25	4	1,000
Minneapolis, St. Paul & Ashland Ry.	R. R. Shop	2	25	150	150	4	1,335
Mowatt, D. W.	Lumber	1	150	110	110	6	200
Murray Lumber Co.	Lumber	1	110	20	20	1	500
North Wis. Roller Works	Roller Works, etc.	1	20	8	8	1	60
Pope Lumber Co.	Lumber	2	8	40	40	1	90
Reis, C., Coal Co.	Coal Dock	1	40	40	40	2	300
Robbins Mfg. Co.	Lumber	1	40	30	30	1	100
Scott and Taylor	Wood Work	2	30	150	150	2	160
Schroeder, J., Lumber Co.	Lumber	1	150	2	2	4	275
Standard Steam Laundry	Laundry	1	2	5	5	7	**
Wis. Central Ry. Co. (Ore Dock)	Ore Dock	1	60	28	28	93	8,547
Total		58	3	2,095	23	2,123	
BELOIT.							
Barrett Mfg. Co.	Paper	4	33	33	33	6	1,600
Beloit Carriage Works	Carriages	1	9	9	9	1	8
Beloit Creamery	Creamery	1	2	2	2	1	15
Beloit Electric Light & Power Co.	Light	1	10	10	10	3	1,300
Beloit Free Press	Printing	1	7	5	5	1	1
Beloit Gas Light & Coke Co.	Gas	1	6	6	6	1	1
Beloit Glove Co.	Gloves	1	4	11	11	2	150
Beloit Iron Works	Machines	4	145	145	145	1	9
Beloit News, Daily and Weekly	Printing	1	10	10	10	1	100
Beloit Steam Laundry	Laundry	1	3	8	8	2	240
Beloit Water Works Co.	Water	2	300	300	300	1	130
Berlin Machine Works	Machinery	1	38	38	38	2	1
Besley, C. H. & Co.	Tools	1	1	1	1	1	1
Blodgett Milling Co.	Elevator	1	1	1	1	1	1
City Mills	Feed	1	5	5	5	1	1
Cunningham Bros.	Planing Mill	1	50	50	50	1	175
Doud, R. J., Knife Works	Knives	1	16	16	16	1	15
Eureka Steam Laundry	Laundry	1	3	7	7	1	10
Excelsior Steam Laundry	Pumps, etc.	1	3	2	2	1	10
Fairbanks, Morse & Co.	Carriages	11	900	800	800	3	1,400
Ferguson Bros.		1	8	8	8	1	1

*=Electric; †=Water; ‡=Gas; §=Hand; **=Leased.

ESTABLISHMENTS INSPECTED.

NAME.	BUSINESS.	BUILDINGS.		EMPLOYEES.		BOILERS.			
		Under 3 stories.	3 or more stories.	Male.	Fe. male.	Total.	Under 16 yrs. of age.	Num-ber.	Total horse power.
BELOIT—Continued.									
Foster, J. A.	Boxes	1		4	4	8		2	3
Foster, John, Shoe Co.	Shoes			100	75	175		1	90
Franz & Newton	Sheet Metal	1		10		10			*
Frazer, H., Mfg. Co.	Machinery	1		8		8		1	20
Gaston, N. B., & Sons	Scales	1	1	42		42		1	1
Gesley Mfg. Co.	Machines	1		5		5			15
Goddard & Allen Co., The	Bicycles, etc.	1		8	2	10		1	*
Johnson, O. J.	Wagons	1		5		5			*
Mattison, C.	Machines	1		5		5		2	*
Mead, A.	Elevator	1		2		2			25
Munger, A. L.	Carriages	1		4		4			*
Newkirk & Wetzel	Sheet Iron	1		5		5			*
Rosenblatt, H., & Sons	Clothing	1		25	125	150		2	*100
Schenck, F., Beloit Brewery	Brewery	1		3		3		1	10
Star Mills	Flour and Feed	1		3		3			*
Thompson, J., & Sons Mfg. Co.	Engines	3	3	160		160		3	190
Thorsley & Sanner	Machines	1		3		3			*
Warner, C. O.	Planing Mill	1		2		2			1
Wa. Sam, Chinese Laundry	Laundry	1		2		2			1
Total		57	7	1,850	239	2,089	13	39	2,432
BERLIN.									
Advance Machine Co.	Water Wheels			4		4			1
Berlin Broom Factory	Brooms	1		7		7		1	1
Berlin Canning & Pickling Co.	Canning	1		3		3			1
Berlin Light, Heat & Power Co.	Light	1		2		2		3	300
Berlin Water Works	Water	2		2		2		2	160
Berlin Whip Co.	Gloves	1		9		9			1
Hollis Steadman & Sons	Produce	2		6	37	43			1
Illinois & Wis. Stone Co.	Crusher	1	1	165	3	168		1	200
Johnson, Nell	Machine Shop	4		4		4		2	25
Klondike Granite Quarry	Quarry	2		30		30		1	50
Knudson, Christie	Wagon Mfg.	1		4		4		1	1
Luther, Henry, Co.	Brooms, etc.	1		22	1	23		4	25

Luther, J. P., Glove Co.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
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*=Electric; †=Water; ‡=Gas; §=Hand; **=Leased.

ESTABLISHMENTS INSPECTED.

NAME.	BUSINESS.	BUILDINGS.		EMPLOYEES.			BOILERS.			
		Under 3 stories.	3 or more stories.	Male.	Fe- male.	Total.	Under 16 yrs. of age.	Num- ber.	Total horse power.	
EAU CLAIRE.										
Bergman & Creamer	Feed	1	.....	2	.....	2	.....	.....	†
Banell, Wm., & Son	Carrriages	3	.....	18	1	19	.....	.....	.....
Chippewa Valley El. Ry. Co.	Elec. Power	1	.....	35	7	35	.....	1	300
City Water Works	Water	1	.....	7	.....	8	.....	2	200
City Steam Laundry	Laundry	1	.....	9	42	51	.....	1	50
Cutter, A. A.	Shoes	2	.....	65	15	80	.....	1	30
Davis, W. J., Elevators, The	Feed	5	.....	5	.....	6	.....	1	30
Dells Paper & Pulp Co.	Paper	1	.....	310	15	325	.....	7	1,500
Dells Lumber & Shingle Co.	Lumber	2	.....	76	.....	76	.....	7	280
Dickerson, John	Brooms	1	.....	2	.....	2	.....	.....	.....
Drummond Bros.	Meat Packers	1	1	35	.....	35	.....	1	50
Eau Claire Boiler Works	Boilers	1	.....	6	.....	6	.....	.....	.....
Eau Claire Book Bindery	Binding	1	.....	2	1	3	.....	.....	.....
Eau Claire Book & Stationery Co.	Blank Books	1	.....	15	5	20	.....	1	50
Eau Claire Gas Co.	Gas	1	.....	4	.....	4	.....	2	150
Eau Claire Hardwood Co.	Boxes	1	.....	25	.....	25	.....	.....	.....
Eau Claire Leader	Publishing	1	.....	11	10	21	.....	.....	.....
Eau Claire Light & Power Co.	Power	1	.....	12	1	13	.....	4	700
Eau Claire Linen Co.	Linen	2	.....	7	49	56	.....	.....	.....
Eau Claire Mattress Co.	Mattresses	3	1	4	.....	4	.....	.....	.....
Eau Claire Trunk Co.	Trunks	1	.....	14	4	18	2	.....	.....
Fish, E. M., & Co.	Sash, etc.	1	.....	38	1	39	.....	.....	.....
Free Press	Publishing	3	.....	5	3	8	.....	.....	.....
Half Moon Lake Shingle Fuel Co.	Shingles	1	.....	50	.....	50	1	6	350
Harold, Der	Rubblng	1	.....	2	1	3	.....	.....	.....
Kurven Dress Stay Co.	Dress Stays	1	.....	1	4	5	.....	.....	.....
Lakeside Elevator Co.	Feed	1	.....	3	1	4	.....	1	40
Lang Canning Co.	Canning	2	.....	70	30	100	.....	2	180
Linderman Box & Vencer Co.	Boxes	1	.....	72	.....	72	23	2	150
McDonough, Frank	Mill Supplies	1	.....	81	1	81	.....	.....	.....
McDonough Novelty Co.	Novelties	4	.....	12	.....	12	.....	.....	.....
Madison St. Mfg. Co.	Sash, Etc.	1	.....	20	.....	20	.....	.....	.....
Michels, Henry	Brewery	1	.....	11	.....	11	.....	1	25
Northwestern Lumber Co.	Lumber	2	1	354	.....	354	1	6	240

Pauly Printing House	Printing	1		3	2	5													†
	Machinery, etc.																		700
Phoenix Manfg. Co.	Fixtures	1		37	1	76													80
Phoenix Furniture Co.	Furniture	1		75	1	88													200
Pioneer Furniture Co.	Lumber	2		125		125													450
Staw Daniel Lumber Co.	Printing	10		276		276													*
Telegram Publishing Co.	Brewery	1		5	7	12													100
Walter, John, Co.	Refrigerators		1	12		12													200
Wis. Refrigerator Co.		6		80		80													
Total		82	6	1,994	197	2,191	49	65											5,485
FOND DU LAC.																			
Able, T. W.	Machine Shop	1		1		1													†
Able Bros.	Machine Shop	1		2		2													†
American Chemical Co.	Chemicals	1		3	5	8													†
Badger Sewing Co.	Clothing	1		115		123	1												†
Beckand Brewing Co.	Brewery	3		12		12													150
Bowen Mfg. Co.	Refrigerator	1	1	230		230													160
Central Steam Laundry	Laundry	1		3	10	13													10
Chapman, A. W.	Spruce Beer	1		2		2													†
Clark Mfg. Co.	Engines	2		1	1	1													†
Cox & Willis	Laundry	1		4	11	15													†
Ehlers, P. J.	Carriages	1		2		2													†
Engel, A. & Son	Bottling Works	1		3	10	13													†
Eureka Steam Laundry	Laundry	1		11	24	35													20
Fond du Lac Awning & Tent Co.	Awnings, etc.		1	3	10	13													†
Fond du Lac Canning Co.	Canning	1	1	11	60	100													100
Fond du Lac File Works	Files	1		3	3	3													30
Fountain City Plow Works	Plows	1		2		2													10
Fond du Lac Implement Co.	Farm implements		1	20		20													40
Fond du Lac Malt & Grain Co.	Mating		2	11		11													40
Fond du Lac Shirt & Overalls Co.	Clothing		1	8		8													80
Fond du Lac Steam Laundry	Laundry		4	4	10	14													*
Fond du Lac Table Manfg. Co.	Tables	1		70	70	70	7												10
Furstnow, A. H. & Co.	Jewelry	1		4		4													250
Furstnow Ring Co.	Jewelry	1		11		11													†
Geddings, Lewis, Mfg. Co.	Machinery	1		45		45													90
Grant, John, & Sons	Brooms	1		9	3	12													†
Gurney Refrigerator Co.	Refrigerators	2	2																†
Guse, H. C.	Wagons			3		3													300
Hass, M. A.	Carriages	1		7		7													†
Hamill Bedding Co.	Bedding	1		4		4													†
Hanson Postal Bag Rack Co.	Postal Bags	1		17	1	18													†
Helmer Milling Co.	Flour		1	5		5													60
Helmer Milling Co.	Feed	5	1	12	1	13													100
Huber & Fuhrman Drug Mill	Drug Mill	1		12	3	15	1												125

* = Electric; † = Water; ‡ = Gas; § = Hand; ** = Leased.

ESTABLISHMENTS INSPECTED.

NAME.	Business.	BUILDINGS.		EMPLOYEES.		BOILERS.			
		Under 3 stories.	3 or more stories.	Male.	Fe- male.	Total	Under 16 yrs. of age.	Num- ber.	Total horse power.
FOND DU LAC—Continued.									
Michler, H. A.	Wagons	1		5		5			1
Molitor, M. & M.	Carriages	1		4		4			1
Moore & Galloway Lumber Co.	Lumber, etc.	2		164		164			150
Nehring, H.	Pop	1		5		5			1
Ougen & Brueger	Carriages	1		11	1	12		2	1
Radclouf, Gustave	Cooper	1		2		2			400
Rueping, F., Leather Co.	Tanning	1	2	250		250		8	1
Sanders Bros. Brewing Co.	Brewery	2		4		4		2	1
Steenburg, O. C., & Co.	Sash, etc.		1	35		35		3	1
Stevens Table Co.	Tables			3		3			1
Sweets, B. F., & H. L., Co.	Wagons	1		50		50			100
Variety Wood Works	Bee hives	1		3		3			1
Winnebago Furniture Co.	Furniture	1	2	240		240		44	1
Total		50	17	1,353	316	1,674	68	42	2,560
GREEN BAY.									
Allert & McGuire	Pickles	1		4	4	8		1	40
Allonez Mineral Spring	Water	1		12		12			15
American Steam Laundry	Laundry	1		3	4	7		1	65
Annen Candy & Biscuit Co.	Candy		1	44	125	169	31	1	55
Brenner & Gazette Co.	Candy		1	19	27	46	6		150
Britton, D. W.	Barrels	2		85		85		2	55
Burns Boiler Co.	Boilers	1		19	1	20		1	500
Diamond Match Co.	Saw Mill	1	1	235		235		5	60
Dickman Schober Mfg. Co.	Sash, etc.	1		32		32		2	90
Ebeling, John H.	Food	1	1	17	1	18		1	125
Evans, R. O., & Co.	Stationery	2	2	33	2	35		1	20
Green Bay Carriage Co.	Carriages	1		14		14			150
Green Bay Planing Mill Co.	Planing	1	1	33		33		1	120
Green Bay Soap Co.	Soap	1		7	1	8		2	360
Hagemelster Brewing Co.	Brewery	5		22		22		1	120
Hanser, J. J.	Water	1		4		4		1	120
Hess, G. B., Co.	Flour	1	1	11	1	12		1	380
Hobert, John, Paper Co.	Paper	3		38	11	49	3	3	

Howard Foundry & Machine Works													
Hudson & Sharp	Machinery	1	1	8	1	8	1	8	1	1	1	1	15
Joannes Bros.	Machinery	1	1	52	1	52	1	52	1	1	1	1	12
Kemper, F. C.	Jewelry	1	1	4	2	4	2	4	2	2	2	2	75
Kennitz Furniture Co.	Furniture	4	4	148	2	148	2	148	2	2	2	2	200
Larson, Wm., Canning Co.	Canning	5	5	17	1	17	1	17	1	1	1	1	120
McDonald, H.	Planing	2	2	60	1	60	1	60	1	1	1	1	60
Milwaukee Sanding Machine Co.	Machinery	1	1	72	1	72	1	72	1	1	1	1	100
Murphy Box Factory	Boxes	1	1	21	1	21	1	21	1	1	1	1	210
Mueller Bros. & Co.	Planing Mill	3	3	130	1	130	1	130	1	1	1	1	70
Murphy Lumber Co.	Saw Mill	1	1	89	2	89	2	89	2	2	2	2	360
O'Leary Bros.	Bollers	1	1	2	2	2	2	2	2	2	2	2	25
Salvator Mineral Spring Co.	Water	1	1	4	4	4	4	4	4	4	4	4	†
Schepek, Frank	Brooms	1	1	2	2	2	2	2	2	2	2	2	†
Straubel, L. A.	Machinery	1	1	30	1	30	1	30	1	1	1	1	†
Rahr, H., Sons Co.	Brewery	1	1	79	8	79	8	79	8	8	8	8	175
Rice, Geo. H.	Planing	3	3	8	8	8	8	8	8	8	8	8	200
Roth, Jos. F.	Foundry	1	1	4	4	4	4	4	4	4	4	4	20
Union Steam Laundry	Laundry	1	1	16	16	16	16	16	16	16	16	16	300
Van Deke, O., Brewing Co.	Brewery	2	2	3	3	3	3	3	3	3	3	3	†
Wing, Sam., Laundry	Laundry	1	1	40	40	40	40	40	40	40	40	40	†
Total		54	12	1,609	335	1,944	186	49	3,732				
JANESVILLE.													
Brockhaus, Carl F.	Dyeing	3	1	4	2	6	1	6	1	1	1	1	12
Bloodzett Milling Co.	Flour, etc.	1	1	21	15	21	15	21	15	15	15	15	†160
Bassett & Echlin Ry. Shops	Harnesses	1	1	18	1	18	1	18	1	1	1	1	30
C. M. & S. Ry. Shops	Shops	4	4	60	60	60	60	60	60	60	60	60	125
Chicago & N. W. Ry. Co.	Novelties	2	2	97	97	97	97	97	97	97	97	97	180
Choat Hollister Furniture Co.	Blindry	1	1	4	4	4	4	4	4	4	4	4	†
Clinton, W. E.	Flour	1	1	14	14	14	14	14	14	14	14	14	†
Ford Milling Co.	Printing	1	1	5	5	5	5	5	5	5	5	5	†
Gazette Printing Co.	Machinery	1	1	30	30	30	30	30	30	30	30	30	145
Globe Works	Tables	1	1	3	3	3	3	3	3	3	3	3	110
Hanson Furniture	Brewery	1	1	6	6	6	6	6	6	6	6	6	360
Hennings, Wm., & Son	Canning	1	1	5	5	5	5	5	5	5	5	5	25
Hohenadel, Jr., Co.	Walves, etc.	1	1	71	71	71	71	71	71	71	71	71	24
Isabel Mfg. Co.	Underwear	1	1	15	15	15	15	15	15	15	15	15	25
Lewis Knitting Co.	Corn Planters	1	1	85	85	85	85	85	85	85	85	85	†
Kent, A. C.	Cotton Batting	2	2	25	25	25	25	25	25	25	25	25	†
Janesville Batting Co.	Wire, etc.	3	3	4	4	4	4	4	4	4	4	4	†
Janesville Barb Wire Co.	Carriages	1	1	30	30	30	30	30	30	30	30	30	†
Janesville Carriage Co.	Clothing	1	1	60	60	60	60	60	60	60	60	60	375
Janesville Clothing Co.	Sheeting	2	2	17	17	17	17	17	17	17	17	17	†
Janesville Cotton Mills		1	1	40	40	40	40	40	40	40	40	40	†

* = Electric; † = Water; ‡ = Gas; § = Hand; ** = Leased.

ESTABLISHMENTS INSPECTED.

NAME.	BUSINESS.	BUILDINGS.		EMPLOYEES.		BOILERS.			
		Under 3 stories.	3 or more stories.	Male	Female.	Total.	Under 16 yrs. of age.	Num-ber.	Total horse power.
JANESVILLE—Continued.									
Janesville Daily Recorder	Printing	1	1	8	2	10		2	•
Janesville Electric Co.	Light	1		7		7			160
Janesville Hay Tool Co.	Tools	1		6		6			•
Janesville Journal	Printing		1	3		3			•
Janesville Machine Co.	Agricultural Implements	3	1	210		210		4	270
Janesville Pearl Button Co.	Buttons	1		15		35			••
Janesville Steam Laundry	Laundry	1	1	4	8	12	1		20
Janesville Street Ry.	Street Car	1		12		12			2
Jeffris Co., The	Sash, etc.	5	1	65		65			1
Krupp, F.	Brewery	3		6		6		2	125
Lowell Hardware Co.	Shop		1	5		5			50
Marzluft & Co.	Shoes	1	1	50	60	110	4		†
Milwaukee Elevator Co.	Elevator		1	2		2			†
New Doty Mfg. Co.	Machinery	3		23		23			80
New Gas Light Co.	Gas	4		10		10		2	
Northern Grain Co.	Elevator		1	4		4			†
Norcross & Doty	Mill	1	1	11	1	12	6	1	45
Northwestern Novelty Co.	Novelties		1	28	16	44			•
Parker Pen Co.	Pens		1	2	8	10			50
Riverside Steam Laundry	Laundry	1		4		4			1
Robinson Brewing Co.	Brewery	1		20	25	45	2	1	180
Rock River Cotton Mill Co.	Cotton Bating		3	15		15		1	30
Rock River Machine Co.	Machinery	1	1	15		35		2	150
Rock River Woolen Mills	Woolens	2		45	35	80	3		15
Sunblett & Co.	Creamery	1		5	2	7		1	60
South Side Brewery	Brewery		3	6		6		2	••
Tallor, M. D.	Machinery		1	6		6			•
Thoroughgood & Co.	Boxes, etc.	1	1	35	20	55	5	1	20
Troy Steam Laundry	Laundry		1	1	4	5		1	•
Williamson Pen Co.	Pens	1		2		2			•
Wisconsin Carriage Co.	Carriages	2	1	49	3	52		1	60
Bennett, F. A.	Marble	1		2		2			†
Doran & Burdick	Carriages	1		3		3			†
Fidfield Bros.	Boxes, etc.	1		4		4			•
Fitchett & Grove	Printing	1		4		4			•

FACTORY INSPECTION.

1113

Heller & Newton	Plow Repairs	1	9	461	1,651	47	3,136	†
Janesville Granite Woras	Granite	1	3	.....	.....	.....	.....	†
Amberly, E. O.	Printing	1	1	.....	.....	.....	.....	†
Parker, W. H.	Printing	1	2	.....	.....	.....	.....	†
Sylvester, Louis, & Son	Tobacco	1	15	50	65	.....	.....	†
Tuckwood Machine Co.	Wind Mills	1	10	10	10	.....	.....	†
Tanburg, G. E.	Printing	1	1	1	2	.....	.....	†
Total		75	1,190	650	3,478	350	4,579	
KENOSHIA.								
Allen, N. R., & Son	Tanners	4	750	.....	750	7	900	†
Badger Brass Mfg. Co.	Lamps	2	71	17	88	2	80	†
Bain Wagon Co.	Wagons	3	271	.....	275	6	300	†
Boosted, Emil	Repairs	1	2	.....	28	11	50	†
Cartier Mfg. Co.	Toys, etc.	5	287	3	240	5	480	†
Chicago Brass Co.	Brass, etc.	4	260	500	750	260	600	†
Chicago Rockford Hosiery Co.	Hosiery	1	10	40	50	1	50	†
Cooper Underwear Co.	Underwear	1	16	.....	14	1	75	†
Davy, Burnt Clay Ballast Co.	Ballast	1	14	.....	30	2	150	†
Grant, C., Mrs.	Sash, etc.	1	30	5	7	1	20	†
Jeffery & Co.	Automobiles	1	80	.....	80	13	160	†
Johnson, Peter H.	Laundry	1	2	.....	3	4	425	†
Kenosha Crib Co.	Furniture	1	5	.....	5	1	10	†
Kenosha Engine Co.	Engines	1	7	.....	7	1	4	†
Kenosha Gas & Elec. Co.	Light	1	2	.....	2	1	10	†
Kenosha Laundry	Laundry	1	10	.....	10	1	4	†
Kenosha Laundry	Toys	1	8	.....	8	1	75	†
Kenosha Sash & Door Co.	Sash, etc.	1	45	.....	45	1	400	†
Lippert Iron Works	Typewriters	1	10	.....	10	8	700	†
Melchbach Type-writer Co.	Wagons	1	900	71	971	30	100	†
Mirsch, Nicholas	Beds	1	5	.....	25	21	100	†
Simmons Mfg. Co.	Machinery	1	58	7	65	1	100	†
Wells & Messler	Bed Springs	2	.....	.....	.....	.....	.....	†
Windsor Spring Co.		1	.....	.....	.....	.....	.....	†
Total		38	2,828	650	3,478	350	4,579	
KAUKAUNA.								
Chicago & N. W. Railway	Shops	7	220	.....	220	3	250	†
Hoelms, Fred, Machine Shop	Machinery	1	3	.....	3	.....	200	†
Kaukauna Electric Light Co.	Light	1	70	.....	70	3	500	†
Kaukauna Fibre Co.	Sulphite Fiber	1	6	.....	6	1	35	†
Kaukauna Lumber Co.	Planing	1	14	.....	14	1	10	†
Kaukauna Machine Works	Machinery	1	2	.....	2	5	10	†
Kaukauna Sun	Printing	1	.....	.....	.....	.....	.....	†

*=Electric; †=Water; ‡=Gas; §=Hand; **=Leased.

ESTABLISHMENTS INSPECTED.

NAME.	Business.	BUILDINGS.		EMPLOYES.		BOILERS.			
		Under 3 stories.	3 or more stories.	Male.	Fe- male.	Total.	Under 16 yrs. of age.	Num- ber.	Total horse power.
KAUKAUNA—Continued.									
Kaukauna Steam Laundry	Laundry	1	.....	.....	3	3	.....	1	10
Kaukauna Times	Printing	1	.....	3	.....	3	.....	1	10
Kaukauna Water Works	Water	1	.....	22	.....	22	.....	2	320
Lindauer Pulp Co.	Pulp	1	.....	78	27	105	5	2	160
Oougaumle Paper Co.	Paper	.....	1	.....	.....	.....	.....	.....	.....
Star Hand Laundry	Laundry	1	.....	95	13	108	.....	3	550
Thilmany Pulp & Paper Co.	Paper	4	.....	101	51	152	.....	3	*408
Union Paper Bag Co.	Bags, etc.	1	.....	.....	.....	.....	.....	.....	.....
Total	.....	23	2	619	99	718	9	22	2,453
LA CROSSE.									
American Can Co.	Tin Pails	3	.....	80	.....	80	6	1	25
Anderson, Mons.	Clothing	.....	1	33	74	107	11	1	80
Andust, Miller Broom Mfg.	Rooms	1	.....	15	.....	15	.....	.....	.....
Bell Machine Co.	Machinery	1	.....	3	.....	3	.....	1	50
Bartt, Franz	Brewery	.....	1	8	.....	8	.....	.....	.....
Benton, Thos. B., & Son	Machinery	1	1	23	5	28	.....	.....	.....
Roycott, W. J.	Printing	.....	1	.....	.....	.....	.....	.....	.....
Brush Elec. Light & Power Co.	Light and Power	1	.....	6	.....	6	.....	.....	240
Burlington Round House	Machinery	1	.....	152	.....	152	.....	2	150
Cargill, B. W. W. & Co.	Elevator	.....	.....	4	.....	4	1	1	80
Class, Chas. T.	Machinery	1	1	4	.....	4	.....	.....	.....
City Water Works	Pumping	1	.....	6	.....	6	.....	4	440
Coleman, C. L., Lumber Co.	Lumber	1	.....	325	21	346	.....	6	620
Davis Medary & Platz	Tannery	1	.....	100	.....	100	3	5	275
Dodd & Son	Cooper	1	.....	8	.....	8	.....	1	60
Edison Light & Power Co.	Light and Power	1	.....	6	.....	6	.....	4	400
Fish Bros.	Cigar Boxes	.....	1	8	17	25	4	.....	.....
Fountain City Drill Co.	Drills	3	.....	7	1	8	.....	1	80
Franklin Iron Works	Machinery	1	.....	9	.....	9	.....	1	15
Funk, M.	Boilers	.....	.....	8	.....	8	.....	.....	.....
Funk, J. B. & Co.	Candy	.....	4	15	75	90	.....	1	75
Gund, John	Brewery	2	3	121	29	150	9	4	590
Hackner, E.	Furniture	1	.....	50	.....	50	4	.....	.....

FACTORY INSPECTION.

1115

Factory Name	Electric	Water	Gas	Hand	Leased	Value	Employees	Capital	Output	Wages	Profit	Loss	Other
Haerter, Nic.	1	2				3	53	1	4	1	4	1	225
Helmert Brewing Co.	1	2				4	170	4	170	4	170	4	500
Hickman, Geo.	1	1				6	54	24	78	6	1	1	80
Holway, N. B., Estate	1	1				40	41	1	41	1	1	1	30
Hyde, S. Y., Elevator	1	1				2	18	25	43	4	2	2	160
Imperial Camera & Mfg. Co.	1	1				60	60	60	60	1	1	1	80
James, John, Co.	1	1				24	24	1	25	1	1	1	80
Keller G. A.	1	1				17	17	9	25	1	1	1	80
Kratzweil, M.	1	1				12	12	12	12	1	1	1	50
Kulu, R. C., & Co.	1	1				63	63	6	68	1	1	1	175
La Crosse Wagon Stock Mfg. Co.	1	1				78	78	2	78	1	1	1	20
La Crosse Boot & Shoe Mfg.	1	1				29	29	32	61	13	1	1	180
La Crosse Box Co.	1	1				151	151	2	153	2	2	2	50
La Crosse Carriage Co.	1	1				10	10	4	15	1	1	1	30
La Crosse City Ry. Co.	1	1				8	8	2	10	1	1	1	80
La Crosse Cracker & Candy Mfg.	1	1				15	15	97	112	24	1	1	180
La Crosse Cracker & Candy Mfg.	1	1				16	16	16	16	1	1	1	30
La Crosse Gas Co.	1	1				5	5	4	9	1	1	1	30
La Crosse Paper Box Co.	1	1				23	23	23	23	1	1	1	180
La Crosse Printing Co.	1	1				20	20	74	94	2	2	2	180
La Crosse Rubber Mill Co.	1	1				2	2	7	7	1	1	1	24
La Crosse Rug Mill	1	1				7	7	36	45	7	7	7	50
La Crosse Soap Works	1	1				9	9	2	27	27	27	27	200
La Crosse Steel Roofing & Corrugating Co.	1	1				17	17	1	18	1	1	1	300
La Crosse Steam Laundry	1	1				50	50	7	27	27	27	27	300
La Crosse Steel Roofing & Corrugating Co.	1	1				46	46	4	50	2	2	2	300
La Crosse Steel Roofing & Corrugating Co.	1	1				38	38	6	57	2	2	2	300
La Crosse Steel Roofing & Corrugating Co.	1	1				4	4	16	16	1	1	1	40
La Crosse Steel Roofing & Corrugating Co.	1	1				17	17	12	17	1	1	1	20
La Crosse Steel Roofing & Corrugating Co.	1	1				3	3	3	3	1	1	1	12
La Crosse Steel Roofing & Corrugating Co.	1	1				8	8	1	9	1	1	1	20
La Crosse Steel Roofing & Corrugating Co.	1	1				26	26	26	26	1	1	1	80
La Crosse Steel Roofing & Corrugating Co.	1	1				9	9	9	9	1	1	1	40
La Crosse Steel Roofing & Corrugating Co.	1	1				8	8	1	9	1	1	1	40
La Crosse Steel Roofing & Corrugating Co.	1	1				4	4	20	24	1	1	1	40
La Crosse Steel Roofing & Corrugating Co.	1	1				1	1	1	1	1	1	1	40

*=Electric; †=Water; ‡=Gas; §=Hand; **=Leased.

ESTABLISHMENTS INSPECTED.

NAME.	Business.	BUILDINGS.		EMPLOYERS.			BOILERS.			
		Under 8 stories.	3 or more stories.	Male.	Fe- male.	Total.	Under 16 yrs. of age.	Num- ber.	Total horse power.	
LA CROSSE—Continued.										
The City Steam Laundry	Laundry	1		5	10	15		1	20	
The Art Glass Co.	Windows	1		3		3			30	
The Lat Crosse Press Co.	Publishers		1	16		16		1	30	
The North Side Lumber Co.	Lumber	1		24		24		2	100	
The Northwestern Association	Publishers	1		9	1	10				
Tomasak & Nekala	Plows	1		2		2		1	20	
Trow, A. S., & Co.	Lumber, etc.	2		71	4	75		4	200	
Torrance, J., & Son	Foundry	1		9	1	10				
Salzer, John A., Seed Co.	Seeds		1	15	7	22				
Segetka & Kohlhaus	Sash, etc.	1	4	145	1	146	12	4	200	
Schorna, Chas.	Furrier	1		1	3	4				
Smith Mfg. Co.	Wagons	1		57		57		2	120	
Sorenson, O. J.	Furniture	1		40	1	41		1	70	
Spicer & Bushman	Printers	1		9		9		1	20	
Star Knitting Co.	Knitting		1	1	22	23	2			
Vlastence Bohemian	Newspaper	1		2	2	4				
Volkfreund Printing Co.	Publishers	1		5		5				
Voght & Ritter	Wagons	1		25		25		1	25	
Warming & Houthmaker	Soda Water	1		5		5		1	10	
Wisconsin Pearl Button Co.	Buttons	1		70	45	115	15	1	150	
Yeo & Clark	Flour	1		5		5		1	60	
Zelster, Geo., & Son	Brewery		1	6		6		2	50	
Total		88	44	2,787	686	3,483	130	107	7,491	
MADISON.										
Alford Bros.	Laundry	1		6	21	27		1	40	
Amerika Pub. Co.	Printing		1		2	2				
Badger State Shoe Co.	Shoes	1		26	10	36				
Breckheimer Brewing Co.	Brewery	1		10		10	1	1	40	
Campbell, Alex.	Feed	1		2		2		1	14	
Cantwell, M. J.	Printing		1	15	5	20				
Capital City Milling Co.	Flour		1	4		4		1	150	
Chl., Mil. & St. P. Ry. Co.	Round House	1		29		29		1	60	
Chl. & N. W. Ry. Co.	Shops	1		80		80		1	60	

FACTORY INSPECTION.

1117

Business	1	15	1,396	166	1,562	29	32	2,789
Curtis, Dexter, Co.	1			6	12			20
Faerberbach Brewing Co.		1	13	6	12			60
F. F. F. Steam Laundry		1	2	18	33			30
Fredrickson, A. D. & J. V.	1		25	18	30			26
Fuller & Johnson Mfg. Co.	4	1	370	6	376	11	2	400
Gisholt Machine Co.	1		170	2	172	4	2	300
Grimm, G. & Son	1	1	8	4	12			7
Hart-Parr Co.	1		15	4	15			13
Hausman Brewing Co.		2	35	35	35	1	2	137
Howard, H. S.	1		5	5	5			45
King & Walker	2		30	30	30		2	45
Ledwith, James	1		4	4	4			1
Madison Candy Co.	1		8	12	20	4		1
Madison City Water Works	1		5	6	6			1
Madison Democrat		1	54	16	70			270
Madison Electric Ry. Co.	2		60	37	60	1		88
Madison Gas & Electric Co.			37	37	37		5	850
Madison Steam Laundry	2	1	12	12	12			14
Madison Saddlery Co.		4	3	1	7		1	14
Malce Bros.	1		4	31	5			1
Northern Electric Co.	1		196	81	217			1
Parr & Kronicke	1		10	10	10		1	1
Payton, Martin	1		16	16	16			1
Silbernagel, J. J.	1		16	16	16		1	40
Standard Telephone & Elec. Co.	1		20	5	25			1
Stark Mfg. Co.	1		28	28	28		1	40
State, The	1		3	3	3			1
State Journal Printing Co.		1	58	2	60	2		1
Swenson, J. A.	1		25	25	25		1	35
Taylor & Gleason		1	6	6	6			1
Technover Candy Co.	1		12	20	32	4		1
Tracy, Gibbs & Co.		1	13	1	14			20
Wies, Botschaffer		1	4	4	4			1
Wies, Staats Zeitung	1		3	3	3			1
Wies, Wagon Co.	2		12		12			1
Total	38	15	1,396	166	1,562	29	32	2,789
MANITOWOC.								
American School Co.	8	1	165	1	166	5	3	150
Begul & Guse	3		18		18		1	4
Brad, I.	3		4		4		1	6
Brandt Printing & Binding Co.	1		11	5	16		1	1
Buerger, H. B. & G. B.	9		150		150		2	160
Burger, H. B.	6		6		6		6	1
Britzen Publishing Co.	1		8	2	10		1	1

*=Electric; †=Water; ‡=Gas; §=Hand; **=Leased.

Agricultural Implements																			
Smally Mfg. Co.	5	.....	86	2	87	.....	2	150	2	.....	65	.....	2	.....	150	.....	.....	.....	.....
Snow Flake Steam Laundry	1	.....	13	6	9	.....	1	2	1	.....	.....	.....	1	.....	2	.....	.....	.....	.....
The Landreth Co.	6	.....	14	75	89	21	75	10	2	.....	.....	.....	2	.....	10	.....	.....	.....	.....
The Jones & Adams Co.	3	.....	60	.....	90	.....	.....	76	1	.....	.....	.....	1	.....	76	.....	.....	.....	.....
Willett, J., & Sons	1	.....	4	.....	4	.....	.....	25	1	.....	.....	.....	1	.....	25	.....	.....	.....	.....
Total	134	21	1,433	226	1,659	43	65	4,806	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
MARINETTE.																			
Eagle Printing Co.	1	.....	12	6	18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Forposten	1	.....	.....	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fremad	1	.....	.....	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Gln Yep	1	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hamilton & Merryman	2	.....	95	.....	95	.....	.....	300	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Leber Noel Mfg. Co.	1	.....	13	.....	13	.....	.....	40	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ludington, N., Co.	1	.....	159	.....	159	.....	.....	500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ludington, N., Co.	1	.....	145	.....	145	.....	.....	400	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lundin & Miller	2	.....	25	.....	25	.....	.....	125	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lum, Sam	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Marinette Roller Works	1	.....	15	.....	15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Marinette Daily Star	1	.....	7	.....	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Marinette Gas, Elec. Light & St. Ry. Co.	2	.....	8	.....	8	.....	.....	435	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Marinette Flour Mill Co.	1	.....	9	.....	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Marinette Iron Works Mfg. Co.	2	.....	116	.....	116	.....	.....	111	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Marinette Lumber Co.	1	.....	100	.....	100	.....	.....	140	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Marinette Lumber Co.	3	.....	250	.....	250	.....	.....	450	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Merriman Mfg. Co.	1	.....	91	.....	91	.....	.....	500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Marinette & Menominee Paper Co.	6	.....	157	.....	174	.....	.....	1,200	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Marinette & Menominee Box Co.	1	.....	75	.....	75	.....	.....	180	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Marinette Soap Works	1	.....	3	.....	5	.....	.....	45	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Marinette River Lumber Co.	1	.....	100	.....	100	.....	.....	880	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Marinette Planing Mill Co.	1	.....	40	.....	40	.....	.....	100	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Marinette Tribune	1	.....	4	.....	4	.....	.....	100	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Marinette Volksbote	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Marinette Water Works Co.	2	.....	10	.....	11	.....	.....	270	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Merriman, R. W., & Co.	1	.....	117	.....	117	.....	.....	600	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Parisian Steam Laundry	1	.....	2	.....	10	.....	.....	25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sam Wing	1	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sawyer, Goodman & Co.	1	.....	200	.....	200	.....	.....	500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sing Kee	1	.....	1	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Standard Oil Co.	1	.....	1	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Stevens, A. W., Co.	3	.....	130	.....	132	.....	.....	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Twin City Bedding Co.	1	.....	4	.....	5	.....	.....	400	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Union Steam Laundry	1	.....	2	.....	10	.....	.....	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Whitbeck, H., Co.	1	.....	190	.....	190	.....	.....	1,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	49	1	2,066	61	2,147	35	92	8,233	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

* = Electric; † = Water; ‡ = Gas; § = Hand; ** = Leased.

ESTABLISHMENTS INSPECTED.

NAME.	BUSINESS.	BUILDINGS.		EMPLOYEES.		BOILERS.			
		Under 3 stories.	3 or more stories.	Male.	Fe- male.	Total.	Under 16 yrs. of age.	Num- ber.	Total horse power.
MARSHFIELD.									
Bast Brothers	Soda water	1		3				1	35
Billie, Haas	Contractor	1		31					50
Democrat Pub. Co.	Printing	1		12				1	60
Hafer & Kaished	Planing	1		3					140
Linster & Kasmussen ..	Flour and Feed	1		29	6	35	3	2	60
Marshfield Bedding Co. .	Mattresses	1		1					1
Marshfield Bolter Works	Boiler	1		10		10		1	60
Marshfield Brewing Co. .	Brewery	1		8		8			1
Marshfield Iron Works ..	Machinist	1		14	1	6		1	125
Marshfield News	Publishers	2		2		6		1	10
Marshfield Stave Co.	Laundry	1		3		3			200
Marshfield Steam Laundry	Publishers	1		6		6		2	1
Marshfield Times	Light and Power	1		6		6			180
Marshfield Elec. Light & Power Co.	Bicycles, etc.	1		131	1	132	18	3	600
Mettelke Brothers	Veneer	1		138		138	29	6	80
Raddis Veneer Co.	Flour and Feed	5		33		33		1	1,540
Updam Mfg. Co.	Furniture	1							
Updam Mfg. Co.	Staves, etc.	1							
Wisconsin Hoop Co.		21	4	445	12	457	52	20	
Total									
MENASHA.									
Gilbert Paper Co.	Paper	1		96	32	128		4	1,500
Howard Paper Co.	Paper	2		83	7	90	2	5	900
McKinnon Excelsior Co. .	Excelsior	2		13	1	14		1	75
Menasha Brewing Co.	Brewery	1		3		3		1	100
Menasha Paper Co.	Shingles	1		32	8	40		1	400
Menasha Wood Spill Pulley Co.	Pulleys	1		30		30		2	80
Menasha Wooden Ware Co.	Wooden Ware	5		1,000		1,000	103	5	1,700
Menasha Woolen Mills ..	Woolens	1		20	41	61		1	150
Mockley Bros. & Fallor ..	Foundry	1		24		24	3	1	200
Strange, John, Paper Co. .	Paper	1		53	7	60		3	

Snyder, John, Planing Mill	1	18	1,412	138	1,648	112	30	5,530	††	Planing Mill	1	18	1,412	138	1,648	112	30	5,530	††
Walter Bros. Brewing Co.	1	1	1	1	1	1	1	1	20	Brewery	1	1	1	1	1	1	1	20	20
Whiting, Geo. W., Paper Co.	1	1	1	1	1	1	1	1	225	Paper	1	1	1	1	1	1	1	225	225
Total	13	18	1,412	138	1,648	112	30	5,530			13	18	1,412	138	1,648	112	30	5,530	
MENOMONIE.																			
Bradlow, L. E.	1		2		2				‡	Stone Cutter	1		2		2				‡
Buckhardt & Son	1		6		6				48	Brewers	1		6		6				48
Dunn Co. Iron Works	1		4		4				30	Foundry	1		4		4				30
Dunn Co. News	1		4		4				†	Publishers	1		4		4				†
Ebert Szek	2		10		10				38	Sash, etc.	2		10		10				38
Excelsior Brick Co.	1		66		66				130	Bricks	1		66		66				130
German Printing Co.	1		6		6				‡	Printing	1		6		6				‡
Herren, C. L.	1		6		6				40	Planing Mill	1		6		6				40
Kemke & Anderson	1		6		6				20	Foundry, etc.	1		6		6				20
Knaap, Stout & Co.	3	1	376		376				750	Lumber	3	1	376		376				750
Menomonic Elec. Light & Power Co.	2		6		6				200	Light	2		6		6				200
Menomonic Hydraulic Pressed Brick Co.	2		160		160				240	Brick	2		160		160				240
Menomonic Steam Laundry	1		4		4				7	Laundry	1		4		4				7
Menomonic Times	1		4		4				‡	Printing	1		4		4				‡
Menomonic Water Works Co.	1		2		2				80	Water	1		2		2				80
Submerged Elec. Motor Co.	2		22		22				†	Motors	2		22		22				†
Wisconsin Red Pressed Brick Co.	1		76		76				100	Bricks	1		76		76				100
Helutz Bros.	1		b		b				10	Wagons	1		b		b				10
Total	24	1	769	7	766	11	27	1,687			24	1	769	7	766	11	27	1,687	
MERRILL.																			
Allen, W. M.	1		2		2				*	Publisher	1		2		2				*
American Hide & Leather Co.	4		20		20				375	Tannery	4		20		20				375
City Water Works	1		2		2				180	Water	1		2		2				180
Curtis, A. T.	1		3		3				†	Publisher	1		3		3				†
Flynn, C. B.	2		260		260				900	Saw Mill	2		260		260				900
Foster Lumber Co.	1		9		9				*	Planing Mill	1		9		9				*
Gilkey & Anson Co.	1		300		300				280	Planing Mill	1		300		300				280
Hixson-Anson Sash & Door Co.	2		125		125				150	Sash, etc.	2		125		125				150
Home Steam Laundry	1		8		8				7	Laundry	1		8		8				7
Johnson, C. N.	1		2		2				95	Publisher	1		2		2				95
Lediger Brewing Co.	1		8		8				60	Brewery	1		8		8				60
Merrill Excelsior Co.	1		7		7				†	Excelsior	1		7		7				†
Merrill Iron Works & Foundry	1		14		14				400	Machines	1		14		14				400
Merrill Lumber Co.	2		224		224				†	Saw Mill	2		224		224				†
Merrill St. Ry., Light & Power	1		2		2					Light	1		2		2				

* = Electric; † = Water; ‡ = Gas; § = Hand; ** = Leased.

ESTABLISHMENTS INSPECTED.

NAME.	BUSINESS.	BUILDINGS.		EMPLOYES.			BOILERS.			
		Under 3 stories.	3 or more stories.	Male.	Fe- male.	Total.	Under 16 yrs. of age.	Num- ber.	Total horse power.	
MERRILL—Continued.										
Millsbaugh, O.	Soda Water	1		3		3	1	1	2	
Salicet, F. W., Lincoln Co. Angelger.	Publisher	1		2		4	1			
Stange, A. A.	Sash, etc.	3	1	689	1	690	80	12	1,000	
Wright, H. W., Lumber Co.	Planing Mill	1	1	135	1	136	1	2	250	
Total		26	3	1,710	17	1,727	108	45	3,679	
MILWAUKEE.										
Abel & Bach Co.	Trunks, etc.	2	5	267	95	362	86	2	100	
Abeles, F. E., & Co.	Clothing		1	10	35	45	6			
Abresch, Chas. Co.	Wagons		2	107		107		2	200	
Ackerman, D., & Co.	Caps	1		7	1	8	1	1	45	
Ackermann, R.	Shoes	1		36	16	52	1	1	20	
Acme Laundry Co.	Laundry	1		7	16	23				
Acme Pattern Co., The	Patterns	1		9				2	120	
Adamant Mfg. Co.	Plaster		1	26		26				
Adams, F. F., Tobacco Co.	Tobacco		2	124	15	139	14	2	150	
Adler, David, & Sons	Clothing		1	94	8	102				
Allis Chalmers Co.	Casting	5		300		300		2	200	
Allis Chalmers Co.	Machinists, etc.	17	4	1,724	9	1,733	12	9	1,200	
Alvers & Lorenz	Carding, etc.	1		2	1	3				
Amazeen & Co.	Shoes		1	47	18	65	10	1	5	
Ambrosia Chocolate Co.	Chocolate	1		3	7	10	1	2	200	
American Bicycle Co.	Bicycles	3	2	280		280	20			
American Boiler Works	Boilers	1		6		6				
American Box Toe Co.	Box Toes		1	20	4	24				
American Bridge Co.	Bridges, etc.	6		327	1	328	23	2	320	
American Can Co.	Tin Ware		1	90	40	130	49	2	80	
American Candy Co.	Candy		1	66	86	152	1	1	60	
American Cereal Co.	Food	1		6	6	12				
American Cereal Co., The	Express			13		13				
American Express Co.	Lithographing	1		100	25	125	2	2	90	
American Fine Art Co.	Art Co.	1	1	370		370	6	4	350	
American Hide & Leather Co., The	Tanning	6	3	60		60		3	875	
American Malt Co.	Malt	3	7	65		65		2	160	
American Malt Co.	Malt	2			5	5		3		

ESTABLISHMENTS INSPECTED.

NAME.	Business.	BUILDINGS.		EMPLOYEES.		BOILERS.			
		Under 3 stories.	3 or more stories.	Male.	Fe male.	Total.	Under 16 yrs. of age.	Num-ber.	Total horse powe.
MILWAUKEE—Continued.									
Biersach & Niedermeyer	Iron	1		25		25			
Blatz Brewing Co.	Brewing	8	11	639	72	711	115	14	1,825
Bletcher, J. S., & Co.	Printing		1	30	3	33	2		†
Blumenfeld, Locher & Brown Co.	Millinery		2	100		100	2	3	250
Bodden Packing Co.	Packing	1		6		6			†
Booth & Porth Co.	Bakery	1		2		2			
Bogenberger, F., & Bro.	Iron	1		2		2			
Bond Lime & Cement Co., The	Lime	2		8		8			
Bowen Mfg. Co.	Drills	1		2		2			
B. & P. Co.	Engines	1		25		25			†
Bradley & Metcalf	Shoes	1	1	184	77	261	16	2	160
Brand, Decker Chemical Co.	Stove Polish	1		6		6			
Brand Stove Co.	Stoves	3	2	194	2	196		1	80
Brandt, C. B., Mfg. Co.	Ammonia, etc.	2		3		3	3		
Breithaupt, L., Printing Co.	Printing		1	11	1	12			**
Brink Bros.	Tailors		1	23	2	31			
Bremer Cycle Mfg. Co.	Bicycles		1	7		7			†
Brill, A. Q., Mirror Plate Co.	Mirrors	1		5		5			†
Brodeser Elevator Mfg. Co., The	Elevators	3		35		35		1	80
Broenen, John	Carriages, etc.	1		6		6			
Brown, I. H., & Co.	Carriages, etc.		1	28		28			
Brown Bouton Glove Co.	Gloves	1		35	76	100	2		†
Brown Corliss Engine Co.	Patterns	1		14		14			**
Browning Mfg. Co.	Electrical Goods		1	24		24			
Bruce, Wm. Geo.	Upholstering		1	4	1	5			
Bub Jos. Co.	Steam Dredges	7	1	25	1	26	4	4	320
Bucyrus Co., The	Printing		2	500		500	2		†
Buehler, Andrew	Contracting	1	1	6		6			*
Buehrin, H. & Son	Printing		1	18	2	20	1	1	75
Burdick & Allen	Foundry	3		52		52			
Burnham, Clinton	Brickyard	1							
Burnham John L.	Brick	1		89		89	10	3	180
Burnham Bros.	Trunks	1	1	14		14	1		
Burroughs, G., & Son	Galv. Iron	1		4		4			
Buttles, F. S.									

[illegible]

*==Electric; †=Water; ‡=Gas; †=Hand; **=Leased.

ESTABLISHMENTS INSPECTED.

NAME.	BUSINESS.	BUILDINGS.		EMPLOYEES.		BOILERS.		
		Under 3 stories.	3 or more stories.	Male.	Fe- male.	Under 16 yrs. of age.	Num- ber.	Total horse power.
MILWAUKEE—Continued.								
Cream City Soap Co.	Soap	1		1			1	12
Cream City Woven Wire Works	Bed Springs		1	65			2	180
Crescent Printing Co.	Printing	1		5			1	*
Crow Stove Polish Co.	Stove Polish		1	13			4	
Crucible Steel Casting Co.	Steel	1		18				*
Currie Bros.	Seeds		1	5	2		7	
Curtis & Yale	Sash, etc.			13				
Cutler-Hammer Co.	Electrical Machinery	6		161	4		5	80
Crystal Soap Co.	Soap	1	1	10	15		1	40
Dahinden & Gallasch	Vinegar	1					1	2
Daisy Roller Flour Mill	Flour		1	63			4	100
Daprato, S.	Statuary	3	2				4	600
Davis Bros. Mfg. Co.	Rollers	1		54				
Davis, H. N.	Plating		1	8			1	35
Dawe Bros. Printing Co.	Printing		1	14			*	
De Both, F. J.	Cooperage	1		6				25
Degenerther Laundry Co., The	Laundry		1	7	21		1	50
Delaney Oil & Lubricant Co.	Oils	1		3	1		1	20
Deuster, P. W. Co., The	Newspaper		1	10				
Devere & Schloegel	Lumber	4		62			1	
Drake & Krahn	Wagons, etc.	2		8				
Diamond Ink Co.	Ink, etc.	1		6	11		3	5
Diamond Soda Works	Soda, etc.	1	1	17	5		1	80
Doelgett & Kirsten	Machinists			21			1	50
Doeringer Artificial Limb Co., The	Artificial Limbs		1	11	1			
Domonast Co., The	Publishers		1	4	5			*
Dorisch, John, & Sons	Carrriages, etc.	2	1	7				*
Doyn, E. F.	Chandeliers		1	8				*
Dunck, H.	Tanks	1		4				
Dutcher, J. A. & P. El., Co.	Castings	1		79			1	20
Dyer Saddlery Co.	Harness		1	23			2	150
Eagle Horse Shoe Co.	Bar Iron			275			1	1,000
Eagle Lye Works	Lye	6	1	8	13		3	40

*—Electric; †—Water; ‡—Gas; §—Hand; **—Leased.

Eastman, C. E.	Coal	2	1	28	100	23	1	10
Elkert Brothers	Tannery	1	1	15	15	15	1	60
Ellsworth & Thayer & Co.	Fur Goods	1	1	100	200	200	1	26
Egan Engineering Co.	Machinery	2	1	21	21	21	1	18
Empire Laundry	Laundry	1	1	2	10	12	3	276
Enterprise Box & Lumber Co.	Boxes	2	1	232	11	232	32	26
Enzel, Frank	Tanning	1	1	11	11	11	1	26
Erie Ry. Co. & Union Steam Boat	Freight	1	1	12	12	12	1	26
Esche, Hugo	Store Fixtures, etc.	1	1	4	4	4	2	26
Uehlein Bros.	Mating	2	2	18	18	18	6	100
Eureka Laundry Co.	Laundry	1	1	13	38	61	1	20
Evening Wisconsin, The	Publishers	1	1	117	6	123	2	300
Everley, J. M.	Printer	1	1	10	10	10	1	450
Eviston, John W., & Son	Carriages	1	1	6	1	6	6	2
Falk Co., The	Boilers	6	2	274	1	276	3	2
Faust Kraus Co.	Machinery	4	2	80	1	61	1	2
Farmers' Lumber Co.	Flour	2	1	12	12	12	1	2
Farrington, G. H., Furniture Co.	Lumber	1	1	5	5	5	1	2
Fetzel, L. H.	Couches	1	1	2	2	2	1	2
Felch, S., Brothers & Co.	Safety Locks	1	1	11	11	15	1	2
Fenckes, J., Co.	Jobbers	1	1	16	4	61	11	2
Filer & Stowell	Candy	3	2	425	45	425	3	276
Filmann Bros.	Machinery	1	1	3	3	3	3	2
Fixter, Jos.	Machinists	4	1	46	46	45	1	100
Flint, J. G., Co.	Cooperage	1	1	39	39	39	1	100
Fowie Printing Co., The	Spices, etc.	1	1	11	11	11	1	2
Franczen, R. & Co.	Printing	1	1	3	3	3	1	2
Frank, L., & Son Packing Co.	Sausages	1	1	53	2	55	13	100
Frank, F. J.	Wagons	1	1	6	6	6	1	2
Friedenker Publishing Co.	Printing	1	1	4	4	4	1	2
Friedlander's Knitting Works	Mittens	1	1	3	122	125	26	2
French Wax Figure Co.	Wax Figures	1	1	10	12	12	1	2
Friend & Works	Clothing	1	1	30	70	100	1	2
Frinkner, H.	Carriages	1	1	8	8	8	3	2
Froedert Bros.	Malt	5	3	35	35	35	3	20
Fuller, Louis, & Co.	Compounds	1	1	6	6	6	1	2
Fuller, Warren Co., The	Stoves	10	1	64	2	650	8	24
Galland-Hensling Pneu. Malt Drum Co.	Machinery	4	1	190	190	190	6	2
Gallun, A. F., & Sons	Tannery	6	8	484	10	494	15	3
Gardner, Campbell	Bell Foundry	3	3	65	65	65	1	35
Gavin Art Glass Co., The	Art Glass	1	1	9	9	9	1	1
Gem Laundry	Laundry	1	1	3	12	16	1	2
Gem Hammock & Fly Net Co.	Fly Nets	1	1	125	200	325	67	225
Gem Milling Co.	Flour	1	1	12	1	13	3	120
Gemeinhardt, John	Cooperage	3	3	22	22	22	1	2

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ESTABLISHMENTS INSPECTED.

NAME.	BUSINESS.	BUILDINGS.		EMPLOYES.		BOILERS.			
		Under 3 stories.	3 or more stories.	Male.	Fe- male.	Total.	Under 16 yrs. of age.	Num- ber.	Total horse power.
MILWAUKEE—Continued.									
Geuder & Paeschke	Enamel Ware	6	2	403	150	553	114	3	390
General Construction Co.	Building Stone .....	..	1	11	..	11	..	1	50
General Construction Co.	Cut Stone	3	..	70	..	70	..	1	40
Geitz & Schrader	Carrriages	1	..	5	..	5	..	..	..
George & Heyer	Upholstering .....	..	1	40	1	41	..	..	..
Gerlach, Wm., & Co.	Mating	2	3	32	..	32	..	2	250
Germania Publishing Co.	Publishing	1	1	220	40	260	12	..	..
Germania Building	Offices	1	1	10	1	11	..	3	300
Gillett & Co.	Printing .....	..	1	11	..	11	1	..	..
Globe Printing Co.	Printing .....	..	1	3	..	3	..	..	..
Globe Wire & Iron Works	Iron	2	..	12	..	12	..	1	20
Gorres, Ph., Barrel Works	Cooperage	1	..	22	..	22	..	..	..
Goldschtein, B.	Tailoring	1	..	6	15	21	..	..	..
Goodrich Transportation Line	Transportation	1	..	24	1	25	6	..	..
Great Western Knitting Co.	Knit Goods .....	..	1	3	..	3	..	..	..
Grossman, Wm., & Co.	Coffee, etc. ....	..	1	4	3	7	..	..	..
Grant Marble Co.	Marble .....	..	1	93	3	96	5	2	120
Graf, John	Brewing	3	..	50	2	52	..	1	35
Grasselli Chemical Co., The	Acids	5	..	50	2	52	..	1	10
Grand Trunk Ry.	Transportation	1	..	3	1	4	..	..	..
Graves Seaman Parlor Furniture Co.	Furniture	1	..	15	..	15	..	..	..
Grede, George, & Bro.	Carrriages, etc.	1	1	60	..	60	3	1	80
Greys Lithographing Co.	Lithographing .....	..	1	14	..	14	..	..	..
Greene's Foundry Co.	Foundry, etc.	1	1	47	6	53	1	..	..
Greene's Stamp & Print Shop	Rubber Stamps	3	..	100	..	100	..	1	60
Grehel, F. L.	Plumbing .....	..	1	4	..	4	..	..	..
Grobben, Geo. E.	Business	1	..	12	..	12	..	..	..
Grocers' Roasting Co.	Roasting	1	..	7	2	9	..	..	..
Gross, F. C., & Brothers Co., The	Packing	2	1	31	1	32	..	2	90
Gross, J., & Sons	Coal	1	..	40	1	41	..	2	150
Gross H. F., Soap Co.	Soap .....	..	1	7	..	7	..	3	125
Gruhl Sash & Door Co.	Sash, etc.	1	1	54	..	54	6	2	140
Gugler Litho. Co. The	Lithographing	1	1	80	30	110	17	2	120
Gunoz, R., & Co.	Packing	2	1	70	..	70	1	3	300

Factory Name	Dyeing, etc.	Coal and Wood	Carriages, etc.	Wagons	Building Material	Printing	Engraving	Galv. Iron	Furniture	Gloves	Fur Goods	Soap	Contracting	Boxes, etc.	Paints	Steel Tanks	Fur Coats, etc.	Carriages	Millinery	Specialties	Food Products	Furs	Brushes	Scrap Iron	Machines	Cooperage	Boxes	Barrels	Perfumes, etc.	Agri. Imp.	Plating	Laundry	Printing Works, etc.	Fluxes	Machinery	Furs	Brass Goods, etc.	Brooms	Purs	Binding	Ranges	Machinist		
Haak & Alten																																												
Haase, Chas. F., Coal Co., The																																												
Habegger, Theodor																																												
Haegeler & Altmann																																												
Hahn & Co.																																												
Hake, F. D.																																												
Hammersmith Engraving Co.																																												
Hamman, Wm.																																												
Hann-Wongelin Co.																																												
Hansen, O. C. Mfg. Co.																																												
Hansen's Empire Fur Co.																																												
Hanser, John & Sons																																												
Hathaway, J. E. & Co.																																												
Hays, George																																												
Hebenschroer & Bartlet																																												
Hecht & Zummach																																												
Hell, Emil Joint Working Co., The																																												
Helmemann, Geo. H., & Co.																																												
Helm, Jos., & Sons																																												
Helm, M. & Co.																																												
Helm Specialty Co., The																																												
Heinz, H. J., Co.																																												
Hellmann, Wm., & Co.																																												
Hendel Wire Brush Co.																																												
Hender, A. C., & Son																																												
Henes & Keller Co.																																												
Hennecke, F. J.																																												
Henning, August																																												

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ESTABLISHMENTS INSPECTED.

NAME.	Business.	BUILDINGS.		EMPLOYEES.		BOILERS.			
		Under 3 stories.	3 or more stories.	Male.	Fe- male.	Total.	Under 16 yrs. of age.	Num- ber.	Total horse power.
MILWAUKEE—Continued.									
Huskey Co.	Bicycles	1		7		7			†
Hustung, E. L.	Mineral Water	2		18		18		2	150
Ideal Laundry Co.	Laundry	1		6		6		1	65
Illinois Leather Co.	Plastering Supplies	2		15	29	35		2	160
Illinois Steel Co.	Steel	35		1,380		1,380		41	6,480
Imperial Knitting Mills	Knit Goods	1		7	14	21	8		†
Independent Milwaukee, The	Brewery	2	1	25		25	3	1	65
Instructive Toy Co., The	Toys	1		58		58		1	15
Interior Woodwork Co.	Woodwork	1	1	1		1	3	2	100
Iverson, J. C., Co.	Frames		1	18	2	20			†
Ivory Mfg. Co.	Starch		1	2	6	8			†
Wieson Heel Co.	Heels	1		20		20			†
Jacobs, K. W.	Cooperage	3	1	68	1	69	5	1	60
Jalass, Henry W.	Box Mfg.	2		10		10		1	60
Jenkins, W. S.	Binding		1	14	46	60	9		65
Jewett & Sherman Co.	Coffee, etc.		1	35	7	42		1	65
Johnson, B. J., Soap Co.	Soap			46	29	75		3	265
Johnson Elec. Service Co.	Electric Sup.		1	89	3	92	5		†
Johnston, Robt. A., Co.	Crackers, etc.	1		1		1	60	2	160
Jonas Cycle Mfg. Co.	Cycles		1	157	217	374			†
Jones, E. P., & Bros.	Iron	2		4		4		1	30
Journal Co., The	Publishers		1	83	4	87	2		†
Joy Bros.	Ship Chandlers		1	14	10	24			†
Jullien, J. B., & Co.	Plumbing	1		9		9			†
Jung Brewing Co.	Brewing	5	6	78	2	80	6	3	240
Turnek, Chas.	Patterns	1		6		6			†
Kalamazoo Knitting Co.	Gloves, etc.		2	60	275	335	97	3	200
Kaempf, Fred	Coppersmith		1	8		8			†
Kalt Zimmer Mfg. Co.	Overshoes, etc.	1		15	20	35	1		†
Katzen Jammer Food Co.	Confectioners	1	1	3	1	4			†
Kearney & Trecker	Machinery	1		32		32			†
Keller, F. W., & Son	Frames	1		9		9		1	15
Kemp Smith Mach. Mfg. Co.	Tools	1		65		65		1	40
Kenwood Automatic Water Heater Co.	Water	1		3		3			†

FACTORY INSPECTION.

1131

Kern & Sons, J. B. A.	Flour	2	3	68	1	1	90	3	4	500
Keogh, Ed.	Printer		1	45			49	1		4
Keuer, Fred	Cooper	2		35			35			80
Kieckhefer Elevator Co.	Elevators	2		33			33		1	80
Kling-Cramer Co.	Printers		1	32			24			
Kipp Co., B. A.	Furniture	1	1	51			6	3		
Klein, Geo.	Repairing	1					211	12		
Kling, Geo. B.	Fly Nets	1	1	1			210			
Knapf, John	Wagons, etc.	1		45			3			
Knauber, J. P.	Lithographing	1	1	10			8	3		
Knebel, H.	Furniture	1		41			34			
Kuehn Boot & Shoe Co.	Shoes	1	1	27			75	4	1	45
Kroll, Hugo	Wagons	1		3			6			
Kroon, Peter	Soap	1		14			3			
Kropend, Andrew	Steel	1		27			14			
Kraus Shoe Co.	Shoes	1	1	7			35	3		85
Krausse & Schneek	Machinists	1		12			7			10
Kruecke Brothers	Brass Foundry	1		12			12			
Krueger Mfg. Co.	Machine Shop	1		8			12			
Krugler & Domann	Printing		1	6			8	1		
Krus, Frank	Engraving		1	1			6	1		
Kuenzil, Henry	Cement, etc.	1		1			1			
Kunip, B.	Bedding	1		1			2			
Kunemann, W.	Binding		1	4			1			
Kunz Automobile Co.	Automobiles	1		12			12	1		
Kunz, J. H., Mach. Co.	Machine Shop	1		8			8			
Kurjer Publishing Co.	Publishing		1	22			27	1		
Laecke, Richard	Tents, etc.	1		2			4			
Ladwig, W. F.	Barbers Sup.		1	1			4			
L. M. & L. S. T. Co.	Transportation	1		3			3			
Lake Side Distilling Co.	Distillery	1		17			17			540
Lake View Laundry	Laundry	1	1	4			11		6	40
Lamp & Miller Mfg. Co.	Brass Works	1		26			26		1	
London Electrotyp Co.	Electrotyping	2	1	15			16		1	25
Langbe, A., Mfg. Co.	Furnishing	1	1	30			30		1	90
Langenberger, John	Sash, etc.	1		4			4		1	25
Lassa, K. M.	Furniture	1	1	10			10		1	10
Lauer, Peter	Contractor	1	1	70			7		2	120
Lawson, S. P., & Jale	Engines	1		7			70			
Layton Co.	Packing	1		3			9	2		
Leacher Bros.	Buffing	1	1	25			25		1	240
Leader Card Works	Cards	1		60			100		2	
Lehigh Valley Trans. Co.	Transportation		1	5			5		1	20
Leidersdorf, B. & Co.	Tobacco		1	17			17			
Lercomb, C. A., Mfg. Co.	Soap			15			15			
Leverance's Laundry	Laundry	1							1	20

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ESTABLISHMENTS INSPECTED.

NAME.	BUSINESS.	BUILDINGS.		EMPLOYEES.		BOILERS.			
		Under stories.	3 or more stories.	Male.	Fe- male.	Total.	Under 16 yrs. of age.	Num- ber.	Total horse power.
MILWAUKEE—Continued.									
Lincoln Ave. Brick Co.	Brick	7		100		100	4	3	180
Lindemann, A. J., & Haverson	Stoves, etc.	2	2	280		280	42	1	80
Lindemann, J. F., & Sons	Tin, etc.		2	32	3	35	5	1	55
Liquid Carbonic Acid Mfg. Co.	Car. Acid			30	7	37			
Lobas, P. M.	Coal, etc.	1		6	1	7		1	45
Loeffelholz, A. L. Co.	Brass Works	2	1	26		26		1	40
Loewenbach, A.	Printing	1		4		4			
Loewenbach Bros.	Rollers	1	1	30		30		1	40
Lohr & Winkbach	Marble	1		8		8			
Lorenz Bros. Macaroni Co.	Macaroni	1		12		12	4	1	60
Low, L., Co.	Barbers' Sup.	1		11	4	15	1	1	28
Loewenbach, R., & Son.	Printers		1	15	2	17			
Luther Brothers	Agri. Imp.		1	21		21		1	35
Luther & Gliese	Tools, Etc.	1		16	1	17	2		
Mandel Engraving Co.	Engraving		1	114	40	154		4	320
Manville Covering Co.	Roller and Pipe Covering		2	32	82	114	4		
Mahler Abbenburg Co.	Clothing	2	1	14		14			
Marks, Adolph & Co.	Clothing	1		5		5	1		
Marshall, A. M.	Brushes			8		8			
Marshall, J. L., Co.	Patterns	1		17	1	18		1	40
Martin, Frank	Furs	1		85		85	2	2	160
Martin, Geo., Tea Co.	Tanners	5	1	166	3	169	1	2	180
Mathews Bros. Mfg. Co.	Furniture	3	2	350	250	600	90	2	250
Mayer, F., Boot & Shoe Co.	Shoes	1	2	2		2		3	360
Maxim Mfg. Co.	Bicycle S.	1	3	263	2	265	41		
Mayhew Mfg. Co.	Chairs	1	1	17		17		2	160
McAlpine Eng. Co.	Engraving		1	3	1	4		1	80
McGeogh Building	Offices		1	38		38			
McGregor, T. L.	Rollers	1							
Mech. Appliance Co.	Motors								
Meckelburg, A. F.	Sash, etc.	1		35		35		2	85
Melnecke & Son, A.	Toys	4	4	145	20	165	32	1	150
Melssner Bergwall Co.	Chemists		1	6	3	9			
Melsenheimer Printing Co.	Printing	1	1	14		14		1	15

Mellen, Will, & Son	Braes	1		5		7	1
Merkel Mfg. Co.	Bicycles	1		7		7	1
Merkel Mfg. Co.	Hardware	1		10		10	1
Mertens & Miller Co.	Boilers	1		21		21	1
Metropolitan Brick	Cases		1	4		6	
Metropolitan Mfg. Co.	Clothing		1	13		88	
Metropolitan Mfg. Co.	Clothing		1	10		75	
Neyer, L. A., Co.	Electricians		1	14		15	
Neyer, O. A., Co.	Horse shoes		1	9		9	
Neyer-Rotter Printing Co.	Printing		1	28		32	
Niddleton Mfg. Co.	Hats and Caps		1	29		36	
Minerva Pig Iron Co.	Iron	7		45		45	
Millbraith Printing Co.	Printing		1	11		11	
Miller, H. C. & Co.	Blank Books		1	35		60	
Milwaukee Art Glass Works	Glass		1	42		42	
Milwaukee Automatic Dumper Co.	Dampers		1	25		25	
Milwaukee Automatic Machine Co.	Machinery	2		28		28	
Milwaukee Automobile Co.	Automobiles		1	26		26	
Milwaukee Bag Co.	Rags	1		63		4	
Milwaukee Barrel Co.	Coopers	3		38		98	
Milwaukee Bedding Co.	Mattresses	1		50		50	
Milwaukee Blank Book Mfg. Co.	Blank Books	1		12		7	
Milwaukee Boller Works	Boilers	1		123		123	
Milwaukee Brass & Copper Works	Brass, etc.	1		80		80	
Milwaukee Brewing Co.	Cur Rearings	3		80		11	
Milwaukee Brick Co.	Brewing	2		27		27	
Milwaukee Casket Co.	Brick	3/		40		40	
Milwaukee Chair Co.	Caskets	3		100		1	
Milwaukee Coffee Roasting Co.	Chairs	1		47		56	
Milwaukee Cold Storage Co.	Coffee	9		1		200	
Milwaukee Cycle Co.	Storage	1		6		6	
Milwaukee Dry Dock Co.	Bicycles		1	12		12	
Milwaukee Dry Dock Co.	Dry Docking	6		12		12	
Milwaukee Dustless Brush Co.	Dry Docking	9		60		60	
Milwaukee Enamel & Electro Plant	Brushes	1		84		1	
Milwaukee Elec. R. R. & Light Co.	Enamel, etc.	1		24		4	
Milwaukee Elec. R. R. & Light Co.	Repairs	1		52		52	
Milwaukee Elec. R. R. & Light Co.	Carpenter, etc.	1		73		73	
Milwaukee Electric Co.	Arc Lights	4		2		2	
Milwaukee Elevator Co.	Dynamos, etc.	2		50		60	
Milwaukee Elevator Co.	Elevators	2		164		187	
Milwaukee Elevator Co.	Elevator	1		18		18	
Milwaukee Foundry & Supply Co.	Patterns	2		28		28	
Milwaukee Gas Light Co.	Gas Storage	1		2		2	
Milwaukee Gas Light Co.	Coal Docks	1		15		15	
Milwaukee Gas Light Co.	Coal Tar	4		6		6	

*=Electric; †=Water; ‡=Gas; §=Hand; **=Leased.

ESTABLISHMENTS INSPECTED.

NAME.	BUSINESS.	BUILDINGS.		EMPLOYEES.		BOILERS.		
		Under 3 stories.	3 or more stories.	Male.	Fe- male.	Total.	Num- ber.	Total horse power.
MILWAUKEE—Continued.								
Milwaukee Gas Light Co.	Repairing	1	1	55	.....	55	7	1,000
Milwaukee Gas Works	Gas	6	1	200	.....	200	.....	.....
Milwaukee Glove & Mitten Co.	Gloves	1	.....	9	17	26	5	800
Milwaukee Harvester Co.	Agri. Imp.	19	7	610	.....	610	13	200
Milwaukee Hay Tool Co.	Hay Tools, etc.	5	.....	68	.....	68	2	.....
Milwaukee Herold	Publishers	1	1	118	6	123	.....	.....
Milwaukee Linseed Oil Co.	Linseed Oil	2	1	28	.....	28	2	160
Milwaukee Lithographing & Engraving Co.	Lithographing	1	1	75	1	76	4	15
Milwaukee Lace Paper Co.	Paper	1	1	14	20	34	5	.....
Milwaukee Lumber Co.	Lumber	1	.....	20	.....	20	.....	.....
Milwaukee Machinery Co.	Machinery	1	.....	8	.....	8	.....	.....
Milwaukee Manufacturing Co.	Planing	1	.....	7	.....	7	.....	.....
Milwaukee M. & G. Iron Co.	Castings	2	.....	90	2	92	3	75
Milwaukee M. & G. Iron Co.	Castings	1	.....	50	.....	50	3	100
Milwaukee Matting Co.	Mattings	4	2	16	1	17	.....	500
Milwaukee Metal Working Co.	Metal Spec.	1	.....	12	.....	12	.....	.....
Milwaukee Metal Working Co.	Metal Wkg.	1	1	10	1	11	.....	.....
Milwaukee Monument Co.	Monuments	1	.....	30	.....	30	1	15
Milwaukee Net Co.	Rly Nets	1	.....	14	51	65	14	.....
Milwaukee News	Publishing	1	1	45	3	48	.....	.....
Milwaukee Novelty Dye & Hat Works	Dyeing, etc.	1	1	26	15	40	.....	8
Milwaukee Optical Mfg. Co.	Optical Goods	1	1	6	2	8	2	.....
Milwaukee Ornamental Carving Co.	Stucco Work, etc.	1	.....	15	.....	15	.....	.....
Milwaukee Palming Co.	Gloves, etc.	1	1	17	38	55	7	.....
Milwaukee Parlor Frame Co.	Frames	1	.....	12	.....	12	.....	.....
Milwaukee Property Co.	Storage	1	.....	3	.....	3	.....	.....
Milwaukee Rice Machinery Co.	Machinery, etc.	1	1	15	2	17	.....	.....
Milwaukee Saloon Fixture Co.	Fixtures	1	.....	33	.....	33	.....	.....
Milwaukee Sand & Gravel Co.	Sand, etc.	2	.....	15	.....	15	.....	25
Milwaukee Spoke & Vending Co.	Spokes, etc.	1	1	10	.....	10	.....	100
Milwaukee Steam Boller Works	Rollers, etc.	1	1	3	.....	3	.....	10
Milwaukee Steel Casting Co.	Steel	1	1	102	.....	102	1	80
Milwaukee Store & Foundry Co.	Stores	2	.....	33	.....	33	2	45
Milwaukee Supply Works	Iron, etc.	1	.....	8	.....	8	.....	.....

Milwaukee Suspender Mfg. Co.	Suspenders	1	2	5	7	1	8
Milwaukee Tack Co.	Nails, etc.	.....	44	6	10	18	30
Milwaukee Tallow & Grease Co.	Tallow, etc.	.....	26	.....	10	1	50
Milwaukee Valve Co.	Ste. Fittings	.....	3	.....	25	.....	100
Milwaukee Vinegar Co.	Yeast, Etc.	.....	.....	2	32	.....	300
Milwaukee Wagon Iron Works	Iron	.....	.....	1	50	.....	160
Milwaukee Western Fuel Co.	Coal	.....	.....	.....	60	.....	180
Milwaukee Western Fuel Co.	Coal	.....	.....	.....	50	.....	220
Milwaukee Western Fuel Co.	Coal	.....	.....	.....	50	.....	425
Milwaukee Western Fuel Co.	Coal	.....	.....	.....	9	.....	35
Milwaukee Western Coal Co.	Coal	.....	123	.....	128	.....	60
Milwaukee Wood Bending Works	Bent Wood, etc.	.....	2	.....	20	.....	160
Milwaukee Wood Work Co.	Sash, etc.	.....	50	1	51	.....	2
Milwaukee Worsted Cloth Co.	Cloth	.....	62	130	.....	55	80
Milwaukee Worsted Mills	Wire	.....	28	35	.....	6	45
Milwaukee Woven Wire Works	Wire	.....	13	44	.....	4	30
Model Steam Laundry	Laundry	.....	10	.....	13	1	.....
Mollitor, M.	Roses	.....	12	1	13	1	.....
Monarch Printers & Advertisers	Printing	.....	6	.....	6	1	.....
Monarch Sign Mfg. Co.	Signs	.....	9	3	12	1	.....
Montwid & Son	Cloth'g	.....	6	1	7	.....	240
Montgomery Bldg.	Offices	.....	1	38	.....	2	40
Moore, H. Co.	Plumber	.....	3	.....	40	.....	105
Moon Whitmore Co.	Baskets, etc.	.....	1	38	1	37	225
Muller, E. P.	Malt Drying	.....	1	.....	.....	.....	.....
Mueller, John L.	Wagons	.....	1	.....	4	.....	.....
Mueller, John L.	Wagons	.....	1	.....	4	.....	.....
Mueller, L. J. Furnace Co.	Furnaces	.....	1	31	1	32	.....
Mueller, Paul F.	Coal and Wood	.....	1	76	.....	6	13
Mueller Co., The	Heating, etc.	.....	1	130	38	168	25
Mueller & Sons Co.	Boxes	.....	1	.....	21	.....	300
Munkwitz, E. H.	Machines	.....	2	7	7	.....	160
My Laundry	Laundry	.....	1	5	10	15	20
Nase, Kraus & Koken	Shades, etc.	.....	1	60	2	62	50
National Box Co.	Boxes	.....	1	24	.....	2	150
National Biscuit Co.	Crackers, etc.	.....	1	150	150	26	80
National Blower Works	Machines	.....	2	36	300	.....	800
National Distilling Co.	Distilling	.....	2	.....	38	.....	1,200
National Enameling & Stamping Co.	Tinware	.....	7	887	1,216	238	1,200
National Elastic Nut Co.	Nuts and Bolts	.....	1	23	24	14	90
National Envelope Co.	Envelopes	.....	1	45	80	125	250
National Envelope Co.	Knit Goods	.....	2	6	375	435	.....
National Knitting Works	Repairing	.....	1	23	100	156	.....
National Machine Works	Paper Mache	.....	1	23	20	20	75
National Paper Mache Co.	Sash, etc.	3	36	1	1	200
National Sash & Door Co.	Hats	3	46	75	121
National Straw Works	

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ESTABLISHMENTS INSPECTED.

NAME.	BUSINESS.	BUILDINGS.		EMPLOYES.		BOILERS.			
		Under 3 stories.	3 or more stories.	Male.	Fe. male.	Total.	Under 16 yrs. of age.	Num- ber.	Total horse power.
MILWAUKEE—Continued.									
Nauvoka, Matt.	Tools	1		3		3			3
Nelson, S. & Co.	Furs	1		10		10	2	1	20
Nelson, S. & Co.	Furs	2		18		18		1	60
Niedecker & Co.	Blank Books		1	19	14	33			
Niedermeyer, A.	Printing		1	2		2	1		5
North Ave. Fuel Co.	Coal and Wood	1		5		5		1	80
Northern Foundry Co.	Foundry	2		27		27	27	2	200
Northern Glass Works	Bottles	9		339		339	100	2	1
Norberg Mfg. Co.	Engines	2	1	281	1	282		1	20
Northern Novelty Works	Novelties	1		8		8		1	160
North Milwaukee Elec. L. Co.	Electric Lighting	1		2		2		2	1
North Side Brush Works	Brushes	1		3		3		1	60
North Side Carriage Works	Carriages	1		10		10		1	30
North Side Coal Co.	Coal	3		12		12		1	60
North Western Chemical Co.	Chemicals	2		2		2			30
North Western Fuel Co.	Coal	4		101		101		3	150
North Western Furniture Co.	Furniture	2	1	71		71	1	1	30
North Western Laundry	Laundry	1		5	12	17		1	30
North Western Litho. Co.	Lithographing		1	33	1	34	4		150
North Western Marine Elevator Co.	Grain		3	9		9		2	510
North Western Malleable Iron Co.	Foundry	12		909		909	56	5	230
North Western Publishing House	Printing		1	9	1	10		1	30
North Western Roasting Co.	Coffee Roasting		1	3		3			20
North Western Straw Works	Hats, etc.	3	3	260	140	400	39	4	30
Novak, Anton	Printing		1	4	5	9			30
Oberberger Forge Works Co.	Forging	1		6		6		1	30
Oberberger, Joseph	Forging	1		8		8			30
Ogden, G. W. & Co.	Carriages		1	7	1	8			30
O'Neill Oil & Paint Co.	Oil and paint			8		8			30
Ossat Brothers	Furniture	1		16		16		1	30
Osborne, Chas. & Co.	Junk	1		3		3			30
Pabst Brewing Co.	Brewing	13	15	1,018	282	1,300	81	24	8,000
Pabst Brewing Co.	Warehouse	2	1	77		77			30
Packages Publishing Co.	Publishers		1	4	1	5			30

Grocers' Spec.	1	11	8	19	2
Pahl, E. R., & Co.	1	16	.....	18	.....
Pahl, E. F., & Co.	1	1	6	16	2
Pain Bros. & Co.	.....	1	30	33	.....
Painter, B.	1	3	19	22	1
Paince Steam Laundry	.....	1	2	32	.....
Paincheck, Chas. & Bros.	1	13	14	14	1
Painworth, Fred. & Bro.	.....	1	10	15	.....
Painke, E. R., & Co.	1	88	27	115	5
Paton Paint Co.	2	2	1	8	2
Patterson Bros.	1	7	1	7	.....
Paul & Eifers Co.	2	6	.....	5	.....
Pawling & Harnischfeyer	.....	300	.....	300	1
Pawling & Harnischfeyer	1	35	.....	35	2
Pawling & Harnischfeyer	1	35	.....	35	1
Peterson, Robert	.....	2	4	4	.....
Petersons Tailoring Co.	1	29	34	63	1
Pere Marquette Trans. Co.	1	14	.....	14	.....
Peterson & Grabben	2	5	.....	5	.....
Perfection Laundry	1	1	30	32	2
Pettit, L. J., & Co.	2	20	30	20	1
Petz & Hoffman	1	6	.....	6	.....
Pfeifer, Wm.	1	10	.....	10	.....
Pfeifer & Smith	.....	14	.....	14	.....
Pfeister & Vogel Island Tannery	4	148	2	150	2
Pfeister & Vogel	6	970	6	970	41
Pfeister & Vogel	9	336	.....	336	7
Pfeister & Vogel	2	36	1	37	11
Pfeister & Vogel	1	21	36	57	.....
Phleggradt Co. The	3	36	1	57	.....
Philadelphia & Reading Coal & Iron Co.	.....	10	.....	10	.....
Phillips & Orth Co.	1	5	245	260	39
Phillips Knitting Works	1	3	.....	4	.....
Phoenix Printing Co.	1	34	1	35	.....
Phoenix Co-operative Barrel Co.	1	1	61	80	2
Pietzsch, Otto, Dye Works	1	17	.....	7	.....
Pietzsch, Fred.	1	16	.....	16	.....
Pine & North Lakes Ice Co.	2	8	.....	8	.....
Pipcorn & Jews	6	294	3	297	1
Pittsington Packing Co.	7	.....	.....	.....	2
Pittsington Packing Co.	6	.....	.....	.....	7
Podlasky, Joseph	1	11	.....	11	.....
Poffor, Geo., Mfg. Co.	4	82	.....	82	3
Poyer, Ed. P.	6	6	.....	6	.....
Poyer, Ed. P.	1	45	.....	45	.....
Prescott, Fred M.	1	32	1	33	1
Preuss, R. J. Co.	1	2	2	2	.....
Pretschold, Chas.	1	55	.....	55	.....
Prinz & Rau Mfg. Co.	1	9	8	17	.....
Prinz Blank Book & Stationery Co.	1	16	1	17	.....
Prinz Blank Book & Stationery Co.	1	1	1	1
Racine Fire Engine & Motor Co.	1	25	25
Radtke Bros. & Kortsch	1	1	1

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ESTABLISHMENTS INSPECTED.

NAME.	BUSINESS.	BUILDINGS.		EMPLOYEES.			BOILERS.			
		Under 3 stories.	3 or more stories.	Male.	Fe. male.	Total.	Under 16 yrs. of age.	Num. ber.	Total horse power.	
MILWAUKEE—Continued.										
Raetz, Gustav	Wagons	1		5		5			1	45
Raushenberger, John, & Co.	Ropes & Cordage	1		34		34			2	*
Razall, H. G., Mfg. Co.	Printing		1	47	19	66				40
Reliance Laundry	Laundry		1	2	19	21			3	375
Reliance Mills	Flour		1	35		35			2	150
Reliance Electric Co.	Elec. Mach.		1	18	3	21				†
Reeling, J. E., & Co.	Furniture		1	22	2	24			3	80
Reich Shoe Co., The	Shoes		1	125	75	200			15	45
Redlake Vinegar Co.	Vinegar, etc.	2		13		13			1	†
Reese, A.	Bicycles			2		2				†
Reiter, Louis	Electrics	1		9		9				430
Rialto Elevator Co.	Elevators	2		25		25			3	87
Rice, J. H., & Friedman Co.	Clothing		1	160	40	200			6	†
Richmond & Conduit Co.	Elec. Plat. Pipe		1	22	1	23				100
Richetson & Schwartz	Paints	2		11		11			1	*
Rickers Soap Co.	Soap		1	12	7	19				†
Riess, Leopold	Coopers	1		11		11				30
Right Laundry, The	Laundry	1		1	14	15			1	†
Riemer Bros. Shoe Co.	Shoes, etc.		1	20	14	34			1	20
Rinzel, P. S.	Furniture		1	4		4			5	150
Riverside Printing Co.	Printing		1	75		75			2	600
Rockwell Mfg. Co.	Sash, etc.	5		272		272			43	*
Robn, Geo. E.	Elec. Const.		1	19	1	20			2	130
Romadke Bros. Co.	Trunks	1	5	300	24	324			1	12
Rom, Robert & Co.	Plumbing	1	1	23		23				†
Roschlauer Auto. & Power Co.	Auto. Gears	1		6		6			1	120
Rosenthal Husker Co.	Agri. Imp.	3		28		28			2	†
Roth Mfg. Co.	Pickles, etc.	1		6	10	16			1	20
Royal Steam Laundry	Laundry	1		2	11	13			1	80
Ruesch, Jacob	Machines		1	2		2			9	*
Rundie & Spence	Manufacturing		1	143	15	158			12	†
Russia Tanning & Fur Co.	Furs		1	135	25	160			8	†
Rutland Transit Co.	Transportation	1		7	1	8				†
Salentine, Henry	Flour	1	1	6		6				†

ESTABLISHMENTS INSPECTED.

NAME.	Business.	BUILDINGS.		EMPLOYERS.		BOILERS.				
		Under 3 stories	3 or more stories	Male.	Fe-male.	Total.	Under 16 yrs. of age.	Num-ber.	Total horse power.	
MILWAUKEE—Continued.										
Sentinel Co., The	Newspaper	1		195	12	207				
Shelling, Chas. H.	Tanners' Sup.			19	1	20				
Shakman, L. A., & Co.	Clothing	1		22	28	50				
Shakman, L. A., & Co.	Cloaks	1		19	1	20				
Shaver, Jos., Granite & Marble Co.	Monuments	1		60		60		1	125	
Sheriff's Mfg. Co.	Marine Castings	2		25		25		1	35	
Sherman & Hunter	Tailoring	1	1	15	2	17				
Siechenberg, A., Rag Co.	Junk			3	2	5				
Siebold, A. G.	Woolens	1		4		4		1	90	
Singer Mfg. Co., The	Repairing		1	16	6	22				
Skobis Bros.	Arch. Iron, etc.	2		24		24		1	75	
Skubol & Schomer	Carriages, etc.	1		9		9		1	10	
Smith, F. J. Co.	Gas Fitting, etc.	1		7		7				
Smith, Geo. F., Steel Casting Co.	Steel	5		120	1	121		2	160	
Smith, Milo H., Co.	Office Sup.		1	6		6				
Smith, Wallace, & Co.	Saddlery		1	138	45	183	12		40	
South Milwaukee Fuel Co.	Coal, etc.	2		10		10		1	10	
South Milwaukee Journal	Printing	1		4	1	5		1		
South Milwaukee Lumber Co.	Lumber	1		4		4				
Spaar, Edmund H.	Cigars	1		6	1	7				
Specialty Mfg. Co.	Machines, Elec. Plat. Mach.		1	16	2	18				
Speech Stove Repair Co.	Jobbers									
Spence Supply Co.	Plumbers' Sup.	1		6	2	8		1	40	
Sodam Specialty Co.	Harness Oils	1		54		54		1	40	
Stamm, Nordmann & Dufk Mfg. Co.	Castings	1	1	28	7	35	3			
Standard Bedding Co.	Bedding		1	13		13				
Standard Brass & Machine Works	Brass	1		60		60		2	130	
Standard Brick Co.	Brick	1		5	5	10		1		
Standard Glove Works	Gloves, etc.		1	6	9	15				
Standard Knitting Co.	Knitting		1	4		4				
Standard Oil Co.	Oil	1		17	1	18		1	20	
Standard Printing & Stationery Co.	Printing	1		6		6				
Standard Steam Laundry	Laundry	1	6	65		65		1	50	
Starke, C. H.	Dock Co.	3						1	150	

FACTORY INSPECTION.

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Star Tannery	3	1	97	1	240
Steel, Adrian	1	1	20	1	20
Stehling & Blommer	1	1	17	1	20
Stefman Lumber Co.	1	1	18	1	1
Stein & Malschke	1	1	10	1	1
Stern, B. & Sons	4	2	65	1	300
Stollenwerk Weber & Co.					
Stolper, Chas. Cooperage Co.			56	1	170
Stowell Mfg. & Foundry Co.	6	6	248	2	200
Straw Steel Casting Co., The	1	1	30	1	25
Struck Fred Casting Co., The	3	3	10	1	8
Suhm Leather Co.			70	1	200
Tabor Glove Co.	1	1	100	130	200
Talish & Co.			6	5	1
Tate, S. E. & Co.	1	1	26	2	1
Tege Lumber Co., The	1	1	30	8	1
Tevels & Grundmann Co.	3	3	30	3	1
Theobalt & Ehlert			8	1	1
T. M. E. R. & L.	1	1	5	4	1
T. M. E. R. & L. Co.	2	1	1,804	25	7,800
Toepner, W. & Sons	1	1	5	5	125
Trenkamp (K. & Co.) F.	4	4	40	50	1
Trostel, Albert & Sons	3	3	8	8	35
Twentyfirst Century Press	9	5	400	400	400
Twentieth Century Press			12	12	1
Thing, R. Fuel Co.	1	1	17	17	1
Uhllein Bros., L. S. M. House	2	2	18	18	80
Ulrichs Carpet Cleaning	1	1	4	1	150
Union Electric Mfg. Co.	1	1	10	10	1
Union Refrigerator & Trans. Co.	2	2	6	6	25
Unit Web & Suspender Co.	1	1	11	3	25
Unger, Fred	1	1	12	4	25
Van Dyke Knitting Co.			11	15	25
Vans, Herman			12	8	125
Vaughan Atlantic Co.			46	106	125
Vaughan Machine Co.			7	14	12
Vera Chemical Co.			4	4	1
Viller Mfg. Co.	1	1	3	3	1
Vilzov, Bornstein & Co.	8	8	275	275	150
Violet Frank	1	1	11	12	1
Wadham's Oil, Grease & Soap	3	3	33	4	165
Wagner, A. F. Mfg. Co.	1	1	18	18	60
Wagner, F. R. Mfg. Co.	1	1	30	30	70
Wagner, J. J.	5	5	63	63	80
Waldeck, Ed. & Co.			4	4	1
Wallace, Smith & Co.	2	2	115	38	8

*=Electric; †=Water; ‡=Gas; §=Hand; **=Leased.

*=Electric; †=Water; ‡=Gas; §=Hand; **=Leased.

ESTABLISHMENTS INSPECTED.

NAME.	Business.	BUILDINGS.		EMPLOYES.		BOILERS.				
		Under 3 stories	3 or more stories	Male.	Fe- male.	Total.	Under 16 yrs. of age	Num- ber.	Total horse power.	
MILWAUKEE—Continued.										
Wallmann Mfg. Co.	Oil Tanks, etc.	1		10	3	13				
Walschlaeger Mfg. Co.	Furniture	2		39	1	40	1	1	66	
Warnke, E. H. & Co.	Jeweler		1			9			5	
Warschauer, Henry	Junk	3		13	15	28		1	5	
Weigell, A.	Bedding, etc.		1	18	7	25	2		+	
Weinbrenner, A. H., Co.	Shoes		1	27	11	38	2		+	
Weiss & Schmidt Pottery Co.	Pottery	2		9		9	2	1	36	
Weise, Paul	Furniture		2	17	3	20	1		+	
Weisel & Co.	Sausage	1		32		32	1	1	50	
Weissenberger, John	Soda Water	1		5		5			15	
Weissleder, Herman	Coppersmith	1		7		7		1	80	
Weissner, John	Beer Kegs	1		9		9		1	14	
Wenzel & Co.	Printers		1	7		7	1		80	
Werner, A.	Silversmith		1	5		5			180	
Wernbach, Louis	Mineral Waters	1		8		8		1	260	
West, H. H. & Co.	Blank Books, etc.		1	14	8	22	2		75	
Westfahl, F. & Co.	Files	2		35		35	1		50	
Western Grip & Trunk Co.	Trunks, etc.		1	27	5	32	4		30	
Western Hardware Mfg. Co.	Iron Beds	6		131	10	141	3	2	180	
Western Leather Co.	Leather	2	1	31	219	250	65	2	260	
Western Lime & Cement Co.	Lime, etc.	2		8		8			75	
Western Mfg. Co.	Casings	1		95		95	3	1	75	
Western Mfg. Co.	Window Display Fixtures		1	7		7			50	
Western Overall Co.	Clothing	1		5	13	18	3	1	30	
Western Paper Co.	Paper		1	12	18	30	3	1	30	
Western Paper Co.	Asphalt	3		15		15		1	+	
Western Paper Co.	Transportation		1	11	1	12			+	
Western Soda Fountain Co.	Soda Fountains	1		7		7			+	
Westlake, de LaHunt & Smith Co.	Printing		1	16		16	3		100	
West Side Mfg. Co.	Shoe, etc.	3		33		33		1	+	
Weitzel Bros.	Printers and Engravers		1	34	18	52	4		+	
Whitnal & Rademauer Co.	Sewer Pipe, etc.	5		21		21		1	+	
Wiener, E.	Upholsterer		1	7		7			+	
Wiens, A. K.	Brushes		1	23	5	28	5		+	

65
5
5
30
50
15
8
15
80
180
280
75
50
30
100
4
4
4

Wiersum, Henry	Hats	1	2	4	3	7	1	1	7	26	1	1	50
Wilbur Seed Meal Co.	Seed Meal	1	2	11	15	26	1	1	7	7	1	1	50
Wilder, John	Stone	1		7		7			4	4		1	10
Wilken & Rohde	Fuel	1		4		4			4	4		2	16
Willer Mfg. Co.	Wood Work	3		90	3	93			44	44		8	8
Wilfanns Bros.	Electrographers	1	1	44		24			56	7		1	1
Witzlins, M. H.	Church Goods, etc.		1		32	15			15	15		1	8
Winding & Gezelachap	Roofers, etc.	1		15		5			5	5		1	8
Windsor Mfg. Co.	Lead Pipe	1		255		255			9	9		1	126
Wis. Bridge & Iron Co.	Bridges	2		9		9			40	40		3	126
Wis. Broom Mfg. Co.	Brooms	1		40		40			14	14		1	1
Wis. Central R. R. Co.	Transportation	1		75		75			14	14		1	1
Wis. Electrical Construction Co.	Electrical Construction	1		35		35			48	48		2	140
Wis. Furniture Co.	Furniture	4	1	75		75			25	25		1	125
Wis. Iron & Wire Works	Builders' Materials		1	8		8			1	1		1	20
Wis. Knitting Works	Knit Goods		1	7		7			533	533		2	175
Wis. Machinery Co.	Machinery	13		533		533			14	14		1	1
Wis. Malleable Iron Co.	Castings	1		2		2			6	6		1	1
Wis. Pharmaceutical Co.	Pharmacists	1		11		11			33	33		2	160
Wis. Overall Mfg. Co.	Clothing	1	1	49		49			29	29		1	40
Wis. Telephone Supply Dept.	Telephone Rep.	1	1	108		108			4	4		1	35
Wobesall, Fred	Coats	2	2	6		6			17	17		2	80
Wollaefer, Mfg. Co., The	Office Furniture	1	1	4		4			105	105		2	200
Wood, C. H. & Co.	Laundry	1		45		45			138	138		7	4
Wornach, Albert	Wagons	1		15		15			10	10		4	1
Wrensch, B. F.	Shoes, etc.	2		100		100			2	2		1	1
Wright, E. Lumber Co.	Planing	1		95		95			7	7		2	2
Wrought Washer Mfg. Co.	Wrought Washers	2		136		136			12	12		2	2
Yewdale Printing Co.	Printing	1	2	89		89			210	210		1	160
Young, Benjamin	Saddlery	1	1	3		3			18	18		1	50
Young Churchman Co., The	Publishing	1	1	241		241			242	242		6	780
Ziegler, Geo. Co.	Confectionery	1	1	1		1			1	1		1	25
Zimmerman & Schilling	Laundry	1	1	8		8			40	40		1	25
Zimmerman's A. Laundry	Tanner	5	1	1		1			57,335	57,335		3	3
Zohrlant, Herman	Brass, etc.	1	1	241		241			8,973	8,973		3	3
Zoster, Martin	Soda Fountains, etc.	2		40		40			48,362	48,362		5	5
Zwietusch, Otto, Co.		2		40		40			577	577		1	1
Total		1,258	577	48,362	8,973	57,335	3,572	876	80,807	80,807		2	200
OCONTO.													500
Alert & McGulre Pickle Co.	Pickles	1		3		3						2	200
Citizen Elec. Light Co.	Elec. Light	1		5		5						5	600
Falls Mfg. Co.	Paper	1	1	141	9	150						5	500
Holt Lumber Co.	Lumber	3	1	242		242						4	500

*=Electric; †=Water; ‡=Gas; §=Hand; **=Leased.

ESTABLISHMENTS INSPECTED.

NAME.	Business.	BUILDINGS.		EMPLOYES.		BOILERS.				
		Under 3 stories.	3 or more stories.	Male.	Fe- male.	Total.	Under 15 yrs. of age.	Num- ber.	Total horse power.	
OCONTO—Continued.										
Oconto Brewing Co.	Brewery	1		10		10		1		75
Oconto Canning Co.	Canning	2		4		4		2		80
Oconto County Enterprise	Publishing	1		3		3				1
Oconto County Reporter	Publishing	1		4	1	5	6			1
Oconto Lumber Co.	Planing	4		232		232	5	7		890
Oconto Milling Co.	Flour		1	5		5		1		80
Oconto City Water Supply Co.	Water	1		2		2		3		180
Spies, Jacob	Planing	2		61		61	2	4		155
Total		13	3	773	23	801	17	30		2,760
OSHKOSH.										
Adams, Mrs. A. P.	Millinery		1		7	7		3		225
American Grass Twine Co.	Twine	13		96		96		1		36
Arnold Vinegar & Yeast Co.	Vinegar	1		2	109	205	2			1
Augustine, Henry	Wagons	3		7		7				50
Badger Canning Co.	Canning	4		15	60	75		1		200
Badger Planing Works	Planing	1		2		2				2
Baderof, Chase Co.	Furniture	3	2	200	2	202	12	1		2
Baldorf, Louis	Machinery	1		3		3				1
Baltis Bros.	Roller Sup.	1		10		10				1
Bicycle Mfg. Co.	Bicycles	1		6		6				1
Bock, Brown Co.	Brooms	1		3		3				1
Brand, Robert, & Son	Furniture	17		17		17				400
Buckstaff Edwards Co.	Caskets	4		235		300	10	4		200
Campbell, Cameron & Co.	Planing	1	4	75		300	2	2		400
Challoner, Geo., & Sons	Machinery	3		56	1	57		1		40
Clark, J. L., Carriage Co.	Carriages	5		121	4	125		1		107
Clough & Co.	Pumps	1		3		3				1
Cook & Brown Co.	Brick	3		20		20				1
Cooper Shop	Cooper	1		2		2		1		12
Cornelius, Frank	Hot Air Heater	1		3		3				4
Davis, Hanson & Co.	Pumps	8		37	1	38	2	1		4

Factory Name	Electric	Water	Gas	Hand	Leased	160	100	260	28	4	3,200
Diamond Match Co.	8	1				160	100	260	28	4	3,200
Diamond Sticky Fly Co.	2	1				20	30	50		1	80
Engine U. S. Works	1	1				5	10	12			20
Forewarned Sleeve Protector	1	1				5	10	12			20
Gillen's Laundry & Dye Works	1	1				5	26	31	2	1	15
Globe Printing Co.	1	1				6		6			15
Gould Printing Co.	5	1				8		8			200
Gunz Bros.	1	1				145		145	17	2	200
Hayes Foster Mills	1	1				8		3			160
Hayes, F. B.	4	1				160	2	162	12	2	160
Hayes Water Proof Bldg. Co.	3					36		36			40
Hedard Chas.	1	1				7	25	32		1	90
Hedard Printing Co.	1	1				2		2			1
Hickling Printing Co.	1	1				24		26			1
Honglin & Chase	1	1				24		26			1
Hollister, Amos, & Co.	1	1				24		26			1
Honolulu Labor	4	1				123	3	127		3	320
Jones & Laborde	8					8	4	8			25
Katz, M. M., & Son	2					9	7	16		1	25
Mathwig, John	1					4		4			1
Miller & Hoffman	1					4		4			1
McMillen, R. & Co., Estate	11	2				125	7	125	3	2	180
Morgan Co.	3	2				350	1	357	31	2	250
Neville, T.	3	1				20	6	21			40
Oshkosh Bedding Co.	3	1				7		7		1	150
Oshkosh Brewing Co.	2	1				11		11		1	25
Oshkosh Brewing Co.	2	1				10	6	16		1	25
Oshkosh Brewing Co.	2	1				6	50	56			800
Oshkosh Cigar Box Factory	2	2				14	1	15		4	200
Oshkosh Clothing Mfg. Co.	6	2				135	2	138	17	2	185
Oshkosh Elec. Light & Power Co.	3	1				53	2	58	1	1	75
Oshkosh Furniture Co.	1	1				4		4			1
Oshkosh Gas Light Co.	3	1				4	12	13		1	20
Oshkosh Logging Tool Co.	1	1				1		1			350
Oshkosh Paint Co.	2	1				5		5		4	816
Oshkosh Soap Co.	2	1				4		4		4	807
Oshkosh Water Works Co.	12	2				580	15	596	84	4	807
Palme Lumber Co.	13					480		490	22	7	807
Palme Lumber Co.	1	1				6		6			1
Palme, John	1	1				2	10	12	1	1	20
Palme Steam Laundry	6	1				257	3	260	22	4	200
Ratford Bros. & Co.	1	1				6		6		1	75
Raur, Chas.	1	1				7		7			150
Reliance Boiler Works	1	1				7		7		2	150
Reliance Flour & Feed Mill	1	1				6		6			150
Search Mfg. Co.	1	1				6		6			150

*—Electric; †—Water; ‡—Gas; §—Hand; **—Leased.

ESTABLISHMENTS INSPECTED.

NAME.	BUSINESS.	BUILDINGS.		EMPLOYEES.			BOILERS.			
		Under 3 stories.	3 or more stories.	Male.	Fe- male.	Total.	Under 16 yrs. of age.	Num- ber.	Total horse power.	
OSHKOSH—Continued.										
Schlitz Brewing Co.	Bottling	2		4		4			40	
Schmidt Bros. Trunk Co.	Trunks	3	2	98	25	123	34	1	100	
Schneider, Louis	Bottle Covers	3		11	29	40	1	1	16	
Smith, A. P., Co.	Flour		1			6		2	150	
Star Foundry & Mach. Works	Saw Mill	1		12	1	13			75	
Starkweather R. R. Co.	Int. Finishing	5		32	1	33		1	1	
Streich, Gabriel	Fire Supplies	2	1	35		35			1	
Strick, A., & Bro.	Wagons	4		60	1	61	1	1	100	
Thullen, J., Distilling Co.	Distilling	4		5		5			60	
Thompson Carriage Co.	Carriages	2	1	50	4	54		1	50	
Troy Steam Laundry	Laundry	1		3	12	15		1	60	
Thierman, Arthur	Plating	1		2		2		1		
Times Office	Publishers	2		21	2	23				
Union Iron Works	Engines	1		21		21				
Warwick & Cole Co.	Coal	2		4		4				
Wenrich, H. F.	Marble	3		10		10				
Western Mfg. Co.	Underwear	1		3	19	22				
Williamson & Libby	Sash, etc.	5		175	1	176	19	3	500	
Winnabago Traction Co.	Railway	2		12		12		3	1,000	
Wis. Art Glass Co.	Glass	1		13	1	14	1			
Wis. Telegraph	Publishers	1		19		19				
Total		227	27	40,373	685	5,058	330	94		
RACINE.										
Adams, E. B., & Son	Springs	1		8		8			8	
Alshuler, Chas., Mfg. Co.	Garments	1		10	165	175	6	1	60	
American School Fur. Co.	Furniture	2	2	225	20	245	20	4	82	
Badger Mfg. Co.	Army Supplies	1		20	125	145	15	1	75	
Bell City Basket Co.	Baskets	1		24		24	4			
Bell City Bolster & Spring Co.	Springs	1	1	11		11		1	75	
Bell City Malleable Iron Co.	Castings	4		268		268	4	2	280	

Factory Name	Product	Electric	Water	Gas	Hand	Leased	Value of Product	Value of Machinery	Value of Buildings	Value of Land	Value of Other Assets	Total Value
Bell City Mfg. Co.	Agricultural Implements	3	1	1	1	1	50	3	20	1	100	100
Bell City Steam Dye Works	Dyeing	1	1	1	1	1	3	20	1	1	1	1
Bell City Sult & Cloak Co.	Cloaks	1	1	1	1	1	13	20	1	1	1	1
Bell City Sash & Door Co.	Sash etc.	1	1	1	1	1	13	20	1	1	1	1
Brown, W. P., Mfg. Co.	Saddlery	9	5	20	1	1	914	2	3	250	25	25
Case, J. I., T. M. Co.	Machines	3	4	400	1	1	914	2	3	250	25	25
Case, J. I., Plow Works	Plows	3	4	400	1	1	914	2	3	250	25	25
Carroll, J. C.	Coal	1	1	10	1	1	20	75	2	2	75	75
Chalmers, Peter	Foundry	1	1	11	1	1	10	10	2	200	2	2
Chicago Rubber Clothing Co.	Machintoshes	1	1	11	1	1	60	10	2	200	2	2
Claney, J. F., & Co.	Coal	1	1	14	1	1	14	14	1	120	1	1
Collier, T. & F.	Mangles	1	1	6	1	1	6	6	1	46	1	1
Dickey Mfg. Co.	Agricultural imp.	1	1	50	1	1	50	50	1	100	1	1
Driver, Thos. & Son	Sash, etc.	1	1	44	1	1	44	2	1	100	1	1
Earle Shoe Co.	Shoes	1	1	43	1	1	43	86	1	40	1	1
Eisenroth, B. D., Tanning Co.	Tanners	1	1	245	1	1	245	9	2	200	1	1
Fish Bros. Wagon Co.	Wagons	1	1	1	1	1	1	245	4	560	1	1
Fisher & Schweitzer	Laundry	1	1	1	1	1	1	7	1	20	1	1
Freeman, G. B., & Co.	Bits	1	1	18	1	1	18	8	1	20	1	1
Freeman, S., & Sons	Bollers	1	1	250	1	1	250	6	2	205	1	1
Gold Medal Furniture Co.	Furniture	1	1	40	1	1	40	60	1	100	1	1
Gochner, C., Wire Works	Fencing	1	1	5	1	1	5	5	1	1	1	1
Graham, F. W. Milling Co.	Patterns	1	1	2	1	1	2	2	1	1	1	1
Hartman Trunk Co.	Trunks	3	2	100	1	1	100	50	2	175	1	1
Higgins Spring & Axle Co.	Springs	3	1	125	1	1	125	7	2	180	1	1
Hilker-Wischers Mfg. Co.	Clothing	1	1	4	1	1	4	64	4	40	1	1
Hodges & Green	Machine Shop	1	1	12	1	1	12	12	1	40	1	1
Holbrook & Armstrong Iron Co.	Machinists	4	3	50	1	1	50	50	1	75	1	1
Horlick Food Co.	Malted Milk	1	1	97	1	1	97	132	17	300	1	1
Imperial Bit & Snap Co.	Bits	1	1	25	1	1	25	25	3	100	1	1
Johnson, S. C.	Wood Floors	1	1	6	1	1	6	6	1	60	1	1
Johnson & Field Mfg. Co.	Separators	1	1	14	1	1	14	14	1	50	1	1
Johnson Printing Co.	Printing	1	1	18	1	1	18	23	1	60	1	1
Kambach-Pfebrich Shoe Co.	Shoes	1	1	28	1	1	28	14	2	90	1	1
Lake Side Malleable Iron Co.	Castings	3	1	150	1	1	150	6	2	200	1	1
Lang Mfg. Co.	Hardware	1	1	8	1	1	8	9	3	1	1	1
Lang Sampling Co.	Dyeing	1	1	7	1	1	7	7	1	1	1	1
Miller, G. Co.	Boots	1	1	161	1	1	161	158	34	150	1	1
Milwaukee Elec. Ry. & Light Co.	Light	1	1	12	1	1	12	12	5	1,100	1	1
Milwaukee E. L. & Traction Co.	Light	1	1	41	1	1	41	41	1	1,100	1	1
Mitchell & Lewis Co.	Wagons	1	1	430	1	1	430	12	4	500	1	1
Model Steam Laundry	Laundry	1	1	2	1	1	2	10	1	20	1	1
Nelson, N. P.	Clothing	1	1	12	1	1	12	2	2	1	1	1
Philbrook Shoe Co.	Pads	1	1	12	1	1	12	2	2	1	1	1
Philbrook Tannery	Tannery	1	1	6	1	1	6	6	1	60	1	1

*—Electric; †—Water; ‡—Gas; §—Hand; **—Leased.

ESTABLISHMENTS INSPECTED.

NAME.	BUSINESS.	BUILDINGS.		EMPLOYES.			BOILERS.			
		Under 3 stories.	3 or more stories.	Male.	Fe. male.	Total.	Under 16 yrs. of age.	Num-ber.	Total horse power.	
RACINE—Continued.										
Pierce Engine Co.	Engines	4		75		75				15
Piggins Bros.	Machines	1		2		2			1	
Printing Co.	Printing		1	11	3	14				
Pugh, W. H.	Coal and Wood			15		15				125
Racine Boat Mfg. Co.	Boats	1		100		100			1	
Racine Brass & Iron Co.	Castings	1		10		10			2	150
Racine Fire Engine Mfg. Co.	Fire Apparatus		1	7		7				1
Racine Furniture Co.	Desks			7		7				1
Racine Gas Light Co.	Gas		20							250
Racine General Mfg. Co.	Neck Yokes	4			20				2	
Racine Hardware Co.	Engines	1		8		8				1
Racine Hatchery Co.	Incubators	1		26		26				1
Racine Knitting Co.	Hostery			8		8				1
Racine News Pub. Co.	Printing		1	6		6				50
Racine Paper Box Mfg. Co.	Boxes	1		10		10			1	
Racine Paper Goods Co.	Pouches			2		2				1
Racine Pole & Spring Co.	Neck Yokes		1	8		8				1
Racine Refrigerator Co.	Refrigerators	1		5		5				1
Racine Steel & Iron Mfg. Co.	Skeels	1		40		40			2	150
Racine Traveling Bag Co.	Valises, etc.	3		90		90			1	70
Racine Trunk Co.	Trunks		1	5	3	8				1
Racine Water Co.	Water		1	23	2	25			1	75
Racine Wagon & Carriage Co.	Wagons	2		5		5				400
Racine Wagon Mills	Woolens	4	5	625		625			4	3400
Racine Mail & Wrought Iron Co.	Hardware	1	2	40	60	100			3	240
Ratner, A. M.	Clothing	5		325		325			6	250
Roberts, J. M.	Cut Stone		1	2	28	30			2	
Roberts & Case	Flour	1		6		6				
Rosecor, M. M.	Trunks		1	5		5				60
Schoen Mfg. Co.	Cloaks		3						1	130
Schoops, Dr., Family Med. Co.	Medicine	1		94	6	100			2	100
Stecher, Weber & Co.	Sash, Etc.		1	24	65	89			1	120
Tacktrones, F. S.	Tanks		1	34	166	200			45	
The Guenther, F. W., Co.	Sauerkraut	1		38		38				1
		3		6		6			1	40
				41		41				

The Times Printing Co.	Printing	1	20	6	28	1	98	306	7,365
West Side Steam Laundry	Laundry	1	3	17	24	1	2	1	20
Winship Mfg. Co.	Pumps, etc.	2	24	20	24	1	1	1	100
Wisconsin Foundry & Mfg. Co.	Castings	1	20	150	150	1	2	1	60
Wisconsin Wheel Works	Bicycles	3	150	150	150	1	2	1	120
Total		116	6,063	3,302	7,365	306	98	306	9,442
RHINELANDER.									
Brown Bros. Lumber Co.	Planing	3	200	7	200	1	2	1	300
Bullders' Hardware Mfg. Co.	Hardware	1	1	1	7	1	1	1	1
City Pumping Station	Water	1	1	1	2	1	1	1	1
Corn, Abner & Son	Planing	2	12	1	13	1	2	1	200
Herald Publishing Co.	Printing	1	1	1	2	1	1	1	100
Johnson & Hinman Lumber Co.	Planing	4	79	1	80	3	4	3	600
Minn., St. Paul & Sault Ste. Marie Ry.	Elevator	1	3	6	6	1	1	1	10
Modu Steam Laundry	Laundry	1	5	1	6	1	1	1	10
New North Publishing Co.	Laundry	1	80	1	80	1	1	1	200
Rice & Thrall	Publishing	1	1	1	1	1	1	1	1
Rhineland Brewery	Saw Mill	1	13	1	13	1	1	1	50
Rhineland Iron Co.	Brewery	1	1	1	1	1	1	1	40
Rhineland Lighting Co.	Machines	1	7	1	7	1	1	1	300
Robbins Lumber Co.	Light	4	151	1	151	1	1	1	300
Stevens Lumber Co.	Planing	1	80	20	180	3	5	3	150
Wabash Screen Door Co.	Saw Mill	1	180	20	200	18	2	2	300
Wisconsin Veneer Co.	Screen Doors	2	46	25	45	8	3	3	180
Wilson & Bronson	Veneer	1	25	4	25	1	1	1	150
Wilson & Bronson	Planing	1	4	4	4	1	1	1	1
Total		26	4,899	30	929	33	36	33	2,880
SHEBOYGAN.									
Ackermann, Chrls.	Coal and Wood	1	5	1	6	1	1	1	5
Aladdin Soap Co.	Soap	1	9	9	9	1	1	1	75
American Folding Bed Co.	Book Cases and Beds	1	50	1	50	4	1	1	100
American Hide & Leather Co.	Leather	3	300	8	300	12	6	6	985
African Mfg. Co.	Chairs	2	267	23	275	23	2	2	250
Balzer, John	Wagon	1	20	20	20	1	1	1	35
Big Hat Laundry	Laundry	1	3	9	12	1	1	1	20
Columbia Shoe Co.	Boots	1	16	9	25	1	1	1	1
Crocker Chair Co., A	Chairs	3	400	50	450	25	3	3	575
Crocker Chair Co., B	Chairs	4	400	50	450	25	5	5	475
Democrat Printing Co.	Printers	1	15	15	15	1	1	1	1
Dillingham Mfg. Co.	Woodenware	1	180	180	180	10	3	3	210
Excelsior Laundry Co.	Laundry	1	2	5	7	1	1	1	20

*—Electric; †=Water; ‡=Gas; §=Hand; **=Leased.

ESTABLISHMENTS INSPECTED.

NAME.	BUSINESS.	BUILDINGS.		EMPLOYEES.			BOILERS.			
		Under 3 stories.	3 or more stories.	Male.	Fe- male.	Total.	Under 16 yrs of age.	Num- ber.	Total horse power.	
SHEROYGAN—Continued.										
Excelsior Wrapper Co.	Bottle Wrappers	1	.....	37	4	41	3	2	200
Frost Veneer Seating Co.	Veneer	1	.....	50	.....	50	.....	1	30
Frost Veneer Seating Co.	Veneer	2	3	242	8	250	.....	2	200
Fryberg, C. B., Lumber Co.	Planing	.....	1	15	.....	15	.....	2	200
Garton Toy Co.	Toys	.....	1	275	.....	275	26	2	160
Gutsch Brewing Co.	Brewery	1	1	27	8	35	.....	2	140
Hall & Ross	Gloves	.....	.....	37	35	72	.....	.....	.....
Howe, L. K.	Printer	1	.....	7	5	12	.....	.....	.....
Jenkins Machine Co.	Machines	1	.....	50	50	50	.....	.....	.....
Jung, J. & W.	Wagons	1	.....	50	50	50	.....	.....	.....
Jung Shoe Co.	Shoes	1	.....	11	.....	11	.....	.....	75
Langrath A., Co.	Canning	2	4	130	50	180	.....	2	800
Mattoon Mfg. Co.	Furniture	.....	.....	400	.....	400	30	8	.....
Myer, Ph., Co.	Foundry and Mach. Shop	2	.....	25	.....	25	.....	.....	.....
Mueller, H. G., Lumber Mfg. Co.	Woodenware	.....	1	16	6	16	.....	1	100
Musical Instrument Mfg. Co.	Instruments	1	2	56	.....	56	.....	.....	.....
Novelty Mfg. Co.	Book Cases	.....	.....	18	.....	18	2	1	25
Optenberg & Sonnemann	Rollers, Etc.	1	3	530	20	550	11	3	620	
Phoenix Chair Co.	Chairs	.....	1	6	.....	6	1	1	16
Schmidt, R. H., & Co.	Bee Hives	.....	5	50	.....	50	.....	1	30
Schreier, K., & Co.	Brewery	1	.....	15	.....	15	.....	1	50
Sheroogan Brick & Tile Co.	Brick	.....	2	392	32	424	40	2	2
Sheroogan Chair Co.	Chairs	1	.....	45	.....	45	2	1	70
Sheroogan Cigar Mould Co.	Moulds	.....	.....	20	.....	20	.....	1	150
Sheroogan Coal Co.	Wood and Coal	1	.....	10	4	14	.....	.....	.....
Sheroogan Daily Journal	Printing	1	.....	10	.....	10	15	2	200
Sheroogan Knitting Co.	Knit Goods	1	.....	38	.....	38	.....	3	375
Sheroogan L. P. & R. R. Co.	Light and Power	2	1	10	16	26	.....	.....	.....
Sheroogan Mineral Water Co.	Bottlers	.....	.....	13	.....	13	.....	1	40
Sheroogan Steam Laundry	Laundry	1	.....	7	.....	7	.....	.....	.....
Sheroogan Telegraph	Printing	1	.....	1	.....	1	.....	.....	.....
Sheroogan Volkshaus	Printing	1	.....	100	.....	100	.....	.....	120
Spratt, G. W., & Co.	Chairs	1	201	108	309	1	80	
Volbrath, Jacob, Mfg. Co.	Foundry	6	22	1	

FACTORY INSPECTION.

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Winter, M., Lumber Co.	1	1	55	4	55	2	160
Wolf & Twig	1	1	7	1	8	1	5
Zimmerman, E. F. W.	1	1	18	1	15	1	45
Zimball, A., & Son	1	1	15	1	15	1	45
Zurhelle, Fred., & Co.	1	1	15	1	15	1	45
Total	48	41	4,648	547	5,195	71	7,391
STEVENS POINT.							
Bennett Steam Bakery	2	2	2	1	3	1	5
Clifford & Fox Lumber Co.	1	1	61	1	61	1	340
Cook, R. A., Central City Iron Works	1	1	7	1	7	1	100
Coye Furniture Co.	1	1	160	1	161	2	170
Gazette, The	1	1	5	2	7	1	12
Haller, Fred	1	1	1	1	1	1	12
Jackson Milling Co.	1	1	13	1	13	1	12
Journal, The	1	1	6	1	7	1	12
Kasholek, P. F.	1	1	1	1	1	1	12
Kuenzel, G.	1	1	1	1	1	1	12
Kuhl, Chas. G.	1	1	1	1	1	1	12
Mitchell, W. W.	1	1	2	1	2	1	12
Pattner & Rounds	1	1	9	1	9	1	90
Plover Paper Co.	1	1	20	1	20	1	80
Racing Knitting Co.	1	1	108	1	109	1	300
Rice, J. & Brother Co.	1	1	2	4	6	1	35
Robnik Polish Weekly	1	1	20	1	20	1	35
Stevens Point Box Co.	1	1	5	1	6	1	100
Stevens Point Light Co.	1	1	30	1	30	1	240
Stevens Point Water Co.	1	1	12	1	12	1	160
Textile Starch Co.	1	1	3	1	3	1	100
Vetler Mfg. Co.	1	1	11	1	11	1	100
Week, John, Lumber Co.	1	1	18	1	18	1	240
Wisconsin Bedding Co.	1	1	109	1	110	1	100
Wisconsin Best Laundry	1	1	18	2	100	1	380
Wisconsin River Paper & Pulp Co.	1	1	3	23	26	1	40
Total	28	4	742	129	871	35	2,760
SUPERIOR.							
Adamant Mfg. Co.	1	1	15	1	15	1	36
America & Shour	1	1	8	1	8	1	72
American Barrel Co.	1	1	45	1	45	1	60
American Heating Co.	1	1	14	1	14	1	60

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ESTABLISHMENTS INSPECTED.

NAME.	BUSINESS.	BUILDINGS.		EMPLOYEES.			BOILERS.			
		Under 3 stories.	3 or more stories.	Male.	Female.	Total.	Under 16 yrs. of age.	Num-ber.	Total horse power.	
SUPERIOR—Continued.										
American Lumber Co.	Planing	1		83		83		1	60	
Baker, C. S., Estate	Machines	1		30		30		2	80	
Baldwin Laundry	Laundry	1		4	8	12			300	
Belt Line Elevator	Elevator		2	32		32		3	70	
Bingham Hardware Co.	Roofting	1		4		4			22½	
Broadway Laundry	Laundry	1		12	50	62		2		
Carlson Bros.	Roofting	1		5		5				
C. M., St. P. & O. Ry. Shops	Round House	1		23		23		3		
Chamber & Johnson	Printing	1		2	1	3				
Carlton Citizen	Printing	1		5		5				
Commander Mill	Flour Mill		1	30	1	31		2	120	
Cowdin, H. F.	Doors, etc.	4		18		18		1	60	
Cowie Bros.	Doors, etc.	1		9		9		1	65	
Dam, F. H.	Sash, etc.	1		6		6				
Douns, D.	Patterns	1		2		2				
Doud, S. & Son	Coopers	1		30		30		3	450	
Duluth-Superior Traction Co.	Power House	1		6		6			130	
Duplex Mfg. Co.	Wind Mills	1		90	1	91		2	150	
Eastern Munn. Ry. Coal Dock	Coal Dock	9		30		30		1	35	
Enterprise Laundry Co.	Laundry	2		37	13	50				
Evening Telegram Co.	Printing	1		37	1	38				
Fagelquest, Frank	Bicycles	1		2		2		4	1,000	
Freeman Mill	Flour		3	65		65		6	750	
Geyer Bottling Works	Bottling	1		30		30		4	1,000	
Globe Elevator Co.	Grain		3	7		7				
Great Northern Elevator	Power House	1		116		116		3	3200	
Great Northern Bottling Works	Bottling	1		6		6		2	160	
Great Northern Ry. Shops	Shops	4		3	1	4				
Hall Elevator Co.	Elevator	1		6		6				
Harmon Printing Co.	Printing	1		2		2				
Henry & Vogel	Carriages	1		3		3				
Herold, N. W.	Printing	1		15		15				
Hilger, F. & Co.	Wagons	1								
Holmes & Bro. Co.	Roofting	1								

[illegible]

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ESTABLISHMENTS INSPECTED.

NAME.	BUSINESS.	BUILDINGS.		EMPLOYES.		BOILERS.			
		Under stories.	3 or more stories.	Male.	Fe-male.	Total.	Under 16 yrs. of age.	Num-ber.	Total horse power.
Whitney Bros.	Contractors	2		65		65			1,500
Wike, Swedish Tribune	Printing	1		3		3			12
Wright Foundry & Mach. Co.	Foundry, etc.	1		6		6		1	300
Youghlany Lehigh Coal Dock	Coal Dock	1		100		100		4	600
American Grass Twine Co.	Twine	1	1	73	7	80	2	2	
C. St. P. M. & O. Ry. Shed	Flour Shed	1		200		200			
Eastern Minn. Ry. Ore Docks	Ore Docks	1		150		150		4	900
Jenks, Nye, Grain Co.	Elevator	1		15		15		1	40
Laure Bros.	Shingles	1		12		12		4	50
Northwestern Ry. Coal Co.	Coal Docks	2		235		225		1	100
Rogers & Ruger	Planing Mill	1		30		30		1	
Superior Boiler Works	Boilers	1		5		5			
Superior Broom Works	Brooms	1		2		2			
Superior Linsseed Oil Co.	Oil Mill	1		15		15		1	
Shuman, W. H.	Wood Work	1		8		8			
Total		125	38	4,249	165	4,414	63	137	15,707
WATERTOWN.									
American Malting Co.	Malting		1	26		26		3	300
Biefelt, Otto, & Co.	Machinery	1		11		11		1	30
Brandt, E. J., Dent Co.	Plumbers		1	39	1	40	1	1	25
Eagle Mill	Flour		1	10		10		1	80
Euper, P. J.	Fuel	1		5		5		1	10
Farnbrook, J.	Boxes	1		15		15	1	1	70
Globe Milling Co.	Flour		1	16		16		2	150
Hartig, Wm.	Boxes	1	2	31		31		2	190
Henry, I. L., Co.	Brewery		1	21	74	95	15	1	40
Jahnke Creamery Co.	Creamery		1	4		4		1	30
Kohl, P.	Dyeing	1		2		2		1	5
Kunert, E., Mfg. Co.	Rollers	1		42		42	1	1	65
Leumerschist, H., & Co.	Barrels	1		8		8			
Lewis, G. B., Co.	Rice Hives		1	65	4	69	7	2	120

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ESTABLISHMENTS INSPECTED.

NAME.	BUSINESS.	BUILDINGS.		EMPLOYEES.			BOILERS.			
		Under 3 stories.	3 or more stories.	Male.	Fe. male.	Total.	Under 16 yrs. of age.	Num. ber.	Total horse power.	
WAUSAU.										
Barker & Stewart	Planing	2	.....	36	1	37	.....	1	80
Central Wisconsin	Publishing	1	.....	5	.....	5	.....	.....	.....
Chicago Excelsior Factory	Excelsior	1	.....	14	.....	14	.....	1	100
Climax Laundry	Laundry	1	.....	3	10	13	2	1	30
Curtis & Yale Co.	Sash, Etc.	.....	1	423	2	425	31	4	300
Derham Bottling Works	Soda Water	1	.....	4	.....	4	1	.....	.....
Eberlin, John	Soda Water	1	.....	1	.....	1	.....	.....	.....
Franzel, J. R.	Machines, etc.	1	.....	3	.....	3	.....	.....	.....
Goodville Bros.	Boxes	1	.....	190	1	161	24	4	45
Kickbush, Fred.	Flour	.....	1	7	1	8	.....	1	300
Mansen, M. E.	Saw Mill	1	.....	65	.....	65	.....	1	90
Mathie Brewing Co.	Brewery	1	.....	12	1	13	.....	4	200
McEaghran Roller Mill	Flour	.....	2	26	1	27	.....	2	160
Miller, J. & A.	Laundry	1	.....	3	12	15	.....	.....	.....
Mortenson, J., Lumber Mill	Planing	2	.....	48	.....	48	.....	1	200
Murry, D. J., Mfg. Co.	Machinery	.....	1	64	2	66	.....	1	100
North Western Sand Paper Co.	Sand Paper	2	.....	19	1	20	.....	1	60
Philosopher Press	Publishing	1	.....	3	1	4	.....	2	115
Rader Brewing Co.	Brewery	.....	1	16	.....	16	.....	.....	.....
Schwentkopske, Aug.	Planing	1	.....	6	1	7	.....	2	120
Stewart Lumber Co.	Saw Mill	1	.....	234	.....	234	1	1	350
Stolzes Sons	Publishing	1	.....	8	1	9	.....	4	.....
Underwood Veneer Co.	Veneer	1	.....	100	1	101	8	3	225
Wisconsin Box Co.	Boxes	1	.....	46	.....	46	5	2	200
Wausau Box & Lumber Co.	Boxes	1	.....	96	2	98	13	2	150
Wausau Daily Record	Publishing	1	.....	6	2	8	.....	1	60
Wausau Electric Co.	Light	1	.....	4	.....	4	.....	4	440
Wausau Excelsior Co.	Excelsior	1	.....	14	.....	14	.....	1	150
Wausau Herald	Publishing	1	.....	1	2	3	.....	.....	.....
Wausau Novelty Co.	Novelties	1	.....	72	.....	72	12	2	145
Wausau Quartz Co.	Quartz	2	.....	10	.....	10	.....	40	.....
Wausau Water Works	Water	1	.....	3	.....	3	.....	1	285
Wausau Wochenblatt	Publisher	1	.....	86	.....	86	.....	2	120
Werthelm Manfg. Co.	Planing Mill	1	.....	.....	.....	.....	.....	.....	.....
Total		34	6	1,602	42	1,644	99	52	3,780	

ESTABLISHMENTS INSPECTED.

Location, Name and Business.	Buildings.		Employees.				Boilers.	
	Under 3 stories.	3 stories and over.	Male.	Female.	T	Under 16 yrs. of age.	Number.	Power.
ABBOTTSFORD, CLARK CO.—								
Abbottsford Creamery	2		32		32		3	163
Wisconsin Central shop	1		30		30		2	150
Totals	2		32		32		3	163
ALBERTVILLE, CHIPPEWA CO.—								
Albertville Creamery, The	1		1		1		1	12
ALMA, BUFFALO CO.—								
Alma Brewing Co., Brewing	2		4		4		1	25
Huefner, Paul	1		2		2		1	20
Totals	3		6		6		2	45
ALMENA, BARRON CO.—								
Almena Creamery	1		2		2		1	15
Dold & Inish, Saw Mill	1						1	60
Totals	2		2		2		2	75
ALMOND, PORTAGE CO.—								
Almond Feed Mill, Grinding	2		4		4		1	25
Almond Wagon Works, The, Wagons, etc. ..	3		6		6		1	1
Totals	5		10		10		1	25
AMERY, POLK CO.—								
Amery Electric Co., Light	1		6		6			**
City Water Works	1		2		2			†
Corey & Galn, Feed Mill	1		3		3		1	35
Free Press, Printing	1		2		2	1		†
Maxon, Hersly & Co., Saw Mill	1		30		30	3	1	60
M., St. P. & S. Ste. Marie, Ry., Elevator ..		1	3		3			†
Northern Supply Co., Elevator, etc.		1	16		16	2		†
Wis. Dairy Co., Creamery	1		2		2		1	30
Totals	6	2	64		64	6	3	125
ANTIGO, LANGLADE CO.—								
Antigo Brewing Co., Brewery	2		7		7		1	50
Antigo Electric Light Plant, Light	1		7		7		3	300
Antigo Herald, Publishing	1		4		4	1	1	5
Antigo Journal, Publishing	1		4		4			*
Antigo Mfg. Co., Staves	1		12		12	1	1	100
Antigo Republican, Publishing	1		2		2			†
Antigo Steam Laundry, Laundry	1		3	2	5		1	7
Citizens' Brewing Co., Brewery	2		8		8		1	75
Crocker Chair Co., Chairs	2	1	45		45	5	3	300
Frost Veneer Seating Co., Veneering	1		65		65	26	3	210
Kellogg, T. D., Mfg. Co., Planing	2		60		60		2	60
Kingsbury & Henshaw, Flour		1	12		12		2	200
Kingsbury & Henshaw, Saw Mill	1		15		15			**
Nelson Planing Mill Co., Planing Mill	1		6		6			*
News Items, Publishing	1		4		4		1	6
Pioneer Iron Works, Repairing	1		4	1	5		1	40
Totals	19	2	258	4	262	33	20	1353
ARBOR VITAE, VILAS CO.—								
Ross Lumber Co., Lumber	4		200		200	5	2	300
ARPIN, GATES CO.—								
Arpin Hardwood Lumber Co., Lumber	3		150		150	9	3	105
AURORA, WAUSHARA CO.—								
Aurora Feed Mill, The, Feed	1		2		2			†
Aurora Creamery	3		4		4		1	30
Totals	4		6		6		1	30

*—Electric; †—Water; ‡—Gas; §—Hand; **—Leased.

ESTABLISHMENTS INSPECTED.

Location, Name and Business.	Build-ings.		Employees.			Boilers.		
	Under 3 stories, 3 stories and over.		Male.	Female.	Total.	Under 16 yrs of age.	Number.	Power.
BALDWIN, ST. CROIX CO.—								
Baldwin Bulletin, Printing	1		3		3			†
Baldwin Cheese Co., Cheese	1		2		2			†
Baldwin Creamery Co.	1		2		2		1	12
Baldwin Light & Water Co., Light	1		2		2		1	100
Baldwin Roller Mills, Flour	1	1	4		4		1	50
Heebink, Herman, Planing	1		8		8		1	40
Jorstad, P., Elevator	1	1	2		2			†
Peterson, A. B., & Co., Elevator	1	1	3		3			†
Thompson Bros., Wagons	1		5		5		1	12
Wis. Elevator Co., Elevator	1	1	2		2			†
Totals	6	4	33		33		5	214
BANGOR, LA CROSSE CO.—								
Hussa Brewing Co., The, Brewery	2		9		9	1	2	140
Independent, Printing	1		1	1	2			†
Totals	3		10	1	11	1	2	140
BARABOO, SAUK CO.—								
Altpeter, Oscar, Bottling	1		2		2			†
Baraboo Creamery Co.	1		4		4		1	30
Baraboo Gas & Elec. Lt. Co., Light	2		6		6		2	300
Baraboo Iron Works, Iron	1		3		3			†
Baraboo Steam Dye Works, Dyeing	1		2		2		1	8
Baraboo Steam Laundry	1	4	5		9		1	15
Baraboo Towel Mills, Towels	1		20	20	40	3		†
Baraboo Water Works, Water	1		2		2		1	85
C. & N. W. Ry. Shops, Round House	1		147	1	148		2	250
Effinger, Fred, Brewery	1		7	1	8	1	1	8
Gem City Canning Co., Canning	1	1	36	35	71			†
Gem City Steam Laundry	1		4	5	9		1	15
Gollmors Machine Shop, Machines	1		3		3			†
Graf, H. C., Woodworking	1		10		10		1	25
Hoyt, L. E., Milling Co., Flour	1	1	4		4			†
Island Woolen Co., Woolens	1	1	50	31	81	3	2	200
Manchester, Flour	1		2		2			†
Moeller, H., & Son, Wagons	1		10		10		1	25
Reul, Geo. M., Woodworking	1		2		2		1	†
Richland, Geo., Brewery	1		9		9		1	15
Totals	18	3	327	98	425	7	16	1066
BARRON, BARRON CO.—								
Barron Co-op. Creamery Co.	1		2		2	1	1	20
Barron Mfg. Co., Saw Mill	1		15		15			†
Barron Roller Mills, Flour	1	1	5		5			†
Barron Stave & Heading Co., Staves	1		20		20		2	140
Barron Water & Elec. Light Co., Water, etc.	1		2		2			†
Barron Woolen Mill, Woolens	1		7	8	15		1	25
Holtz, Chas., Planing	1		4		4		1	16
North Wis. Canning Co., Canning	1		25	25	50		2	50
Republican, The, Printing	1		2	1	3			†
Smith, E. D., Planing	1		6		6		1	20
Totals	9	1	88	34	122	1	8	271
BARRONETTE, BARRON CO.—								
Barronette Creamery Co.	1		2		2		1	20
Larson, H. M., Saw Mill	1		17		17		1	35
Laursen, Peter, Brick	1		8		8	1	1	15
Peterson, Martin, Brick	1		6		6	1	1	25
Totals	4		33		33	2	4	95

*—Electric; †—Water; ‡—Gas; §—Hand; **—Leased.

ESTABLISHMENTS INSPECTED.

Location, Name and Business.	Buildings.		Employees.				Boilers.	
	Under 3 stories.	3 stories and over.	Male.	Female.	Total.	Under 16 yrs. of age.	Number.	Power.
BAYFIELD, BAYFIELD CO.—								
Booth, A., & Co., Fish, etc.	2		60		60	1	2	22
Boutin, S. L., Fish	1		60		60	2		‡
Knight, Wm., Saw Mill	1		50		50		4	300
Pike Lumber Co., Saw Mill	4		100		100		5	750
Water, Light & Power Plant, Water, and L.	1		2		2		1	50
Totals	9		272		272	3	12	1122
BEAVER DAM, DODGE CO.—								
American Steam Laundry, Laundry	1		2	4	6		1	125
Beaver Dam Cotton Mills, Cotton		1	60	100	160	27	3	240
Beaver Dam Illuminating Co., Light	1		3		3		2	200
Beaver Dam Malleable Iron Co., Iron	3		299	1	300	13	1	100
Beaver Dam Water Co., Water	1		2		2		2	160
Beaver Dam Woolen Mills, Woolens	1		32	40	72	9	2	150
Benzel, J. P., Brewery	1		4		4		1	20
Bon Ton Bottling Works, Bottling	1		4		4		1	10
City Brewery, Brewing	1		4		4			†
Empire Roller Mills, Flour	1		4		4		1	100
Hass, H. E., Gasoline Engine Works, Engines	1		4		4			†
Malleable Iron Range Co., Stoves	1		68	12	80	1	2	160
Miller, J. W., Monuments	1		7		7			‡
Peacock, M. B. M., Elevator	1		5	1	6			†
Risman, O. F., Elevator	1		4		4			†
Rowell, J. L., Mfg. Co., Machinery	2	1	146	1	147		1	125
Ruedebsch, C. F., Creamery	1		4		4		1	15
Williams, F. F., Elevator	1		3		3			†
Totals	20	2	655	159	814	50	18	1405
BELDENVILLE, PIERCE CO.—								
Baker, C. J., Elevator	1		4		4			†
Beardsley, Andrew, Saw Mill	1		8		8		1	50
Brimmer, W. D., Staves	2		32		32	3	2	65
Larson Bros., Lumber	1		20		20		1	40
Totals	5		64		64	3	4	155
BIRON, BAYFIELD CO.—								
Chicago Coal & Lumber Co., Saw Mill	2		60		60	3	4	200
BLACK RIVER FALLS, JACKSON CO.—								
Badger State Banner, Printing	1		5	1	6			†
Black River Falls Iron Works, Foundry	1		5		5			†
Black River Falls Starch Co., Starch		1	9		9		1	50
Bright & Bailey, Feed	1		2		2			†
Charter Oak Milling Co., Flour	1		4		4			†
Dunn, John, Elevator	1		3		3			†
Elbertson, Ole, Elevator	1		2		2			†
Jackson Co. Journal, Printing	1		4		4	1		†
McGillivray, J. J., Sash	1		25		25			†
Mason, R. G., & Son., Light	1		4		4			†
Matson Bros. & Co., Wagons	1		8		8			†
Mower, C. E., Creamery	1		2		2		1	12
Narracong, C. W., Flour	1		3		3			†
Olson, P. R., Wagons	1		4		4			‡
Owen, John L., Water	1	1	1		1			†
Totals	14	1	81	1	82	1	2	62

*—Electric; †—Water; ‡—Gas; §—Hand; **—Leased.

ESTABLISHMENTS INSPECTED.

Location, Name and Business.	Buildings.		Employees.				Boilers.	
	Under 3 stories.	3 stories and over.	Male.	Female.	Total.	Under 16 yrs. of age.	Number.	Power.
BLOOMER, CHIPPEWA CO.—								
Advance, The, Printing	1	...	2	1	3	...	...	†
Advocate, The, Printing	1	...	1	1	2	...	...	†
Bloomer Brewing Co., Brewery	1	...	5	...	5	...	1	20
Bloomer Creamery	1	...	2	...	2	...	1	20
Bloomer Machine Works, Machinery	2	...	5	...	5	...	1	10
Bloomer Produce Co., Elevator	1	1	5	...	5	...	1	25
Bloomer Roller Mills, Flour	1	...	4	...	4	...	...	†
New Richmond Roller Mills, Elevator	2	1	4	...	4	...	...	†
Wilson-Weber Lumber Co., The, Lumber	2	...	42	...	42	...	2	80
Totals	9	2	70	2	72	...	6	155
BOYCEVILLE, DUNN CO.—								
Boyceville Creamery Co.	1	...	3	...	3	...	1	12
Tiffany Creek Mills, Grist	1	...	2	...	2	...	...	†
Totals	2	...	5	...	5	...	1	12
BRILLION, CALUMET CO.—								
Altman & Schriber, Carriages	1	...	4	...	4	...	1	20
Behnke, C. W., & Son, Flour	1	...	5	...	5	...	1	100
Brillion Furniture Co., Tables .....	...	2	45	...	45	4	1	100
Brillion Iron Works, Machinery	1	...	6	...	6	...	...	†
Brillion Lumber Co., Planing	1	...	9	...	9	...	1	50
Ormsby Lime Co., Lime	1	...	51	...	51	...	...	†
Otto, F. A., Carriages	1	...	6	...	6	...	...	†
Totals	5	3	126	...	126	4	4	270
BRODHEAD, GREEN CO.—								
Charlton & Hanford, Printing .....	...	1	3	1	4	1	...	†
BROKAW, MARATHON CO.—								
Wausau Paper Mills Co., Paper	3	...	167	10	177	3	4	700
BRUCE, CHIPPEWA CO.—								
Beldenville Lumber Co., Lumber	3	...	115	5	120	4	6	750
News Letter, The, Printing .....	...	...	2	...	2	...	...	†
Totals	4	...	117	5	122	4	6	750
BRUSHVILLE, WAUSHARA CO.—								
Brushville Creamery	3	...	3	...	3	...	1	25
BURLINGTON, RACINE CO.—								
Ayres, M. L., & Son, Grist Mill .....	...	1	1	...	1	...	...	†
Burlington Blanket Co., Blankets	2	...	23	89	112	...	2	80
Burlington Free Press, Printing	1	...	2	...	2	...	...	†
Burlington Record, Printing	1	...	1	...	1	...	...	†
Burlington Steam Laundry	1	...	1	3	4	...	1	1
Burlington Water Works	1	...	1	...	1	...	1	125
Klein, F. G., Co., Bottling	1	...	10	...	10	...	1	25
Standard Democrat, Printing	1	...	3	...	3	...	...	†
Wagner Bros., machinery	1	...	3	...	3	...	1	15
Wisconsin Condensed Milk Co., Con. Milk	1	...	52	18	70	1	3	300
Zwiebel, A., Jr., Machinery	1	...	8	...	8	...	1	40
Totals	11	1	105	110	215	1	10	836
BURNETT JUNCTION, DODGE CO.—								
Beaver Dam Creamery Co.	1	...	2	...	2	...	1	20
Peachey, J. H., Elevator	2	...	3	...	3	...	...	†
Totals	3	...	5	...	5	...	1	20

* = Electric; † = Water; ‡ = Gas; § = Hand; ** = Leased.

ESTABLISHMENTS INSPECTED.

Location, Name and Business.	Build- ings.	Employees.				Boilers.	
		Under 3 stories and over.	Male.	Female.	Total. Under 16 yrs. of age.	Number.	Power.
BUTTERNUT, ASHLAND CO.—							
Bauer Bros. & Knoop, Saw Mill	2	10	10	...	1	65	
Benjamin, F. G., Staves, etc.	1	10	10	...	1	40	
Chicago Creamery Co.	2	20	20	...	1	100	
Goellner Bros., Shingles	1	14	14	...	1	50	
Totals	6	54	54	...	4	255	
CAMERON, BARRON CO.—							
Breitenbach, John, Creamery	1	2	2	...	1	20	
Cameron Review, Printing	1	2	2	...	...	...
Onk Grove Handle Co., Handles	1	8	8	...	1	60	
Totals	3	12	12	...	2	80	
CANTON, BARRON CO.—							
Canton Cheese Factory	1	2	2	...	1	16	
Locke, Wm., Saw Mill	1	...	...	...	1	50	
Totals	2	2	2	...	2	66	
CARROLLVILLE, MILWAUKEE CO.—							
United States Glue Co.	3	2 108	28 136	1	4 1550		
CASHTON, MONROE CO.—							
Cashton Lumber Co., Planing Mill	1	15	15	...	1	30	
Cashton Milling Co., Flour	1	5	5	...	1	60	
Cashton Record, The, Printing	1	3	1 4	...	...	...
Cashton Steam Laundry	1	1 2	3	...	1	12	
Elgin Creamery Co.	1	5	5	...	1	20	
Mitley, P. E., Elevator	1	3	3	...	...	...
Lenz, Theodore, Carriages	1	4	4	...	1	12	
Skaten, C., Bottling	1	2	2	...	...	...
Totals	8	38 3	41	...	5	134	
CATAWBA, PRICE CO.—							
Hammer, P. H., Lumber	1	12	12	...	1	60	
CEYLON, ST. CROIX CO.—							
New Richmond Roller Mill Co., Elevator	1	3	3	...	...	...
Northern Grain Co., Elevator	1	2	2	...	...	...
Totals	2	5	5	...	...	...
CHETEK, BARRON CO.—							
Chetek Alert, Printing	1	2	1 3	...	...	...
Chetek Creamery	1	2	2	...	1	12	
Glaze, W. & Son, Saw Mill	2	10	10	...	2	70	
Knapp, Stout & Co., Flour .....	...	1 5	5	...	...	...
Totals	4	1 19	1 20	...	3	82	
CHILTON, CALUMET CO.—							
Binsfeld Bros., Flour .....	...	1 2	2	...	1	90	
Dorschel, Schultz & Co., Sash, etc.	1	14	14	...	1	80	
Duemke & Rassch, Flour .....	...	1 2	2	...	1	45	
Glerow & Hach, Brewers	1	16	16	...	1	80	
Juckem, Peter, & Co., Grain .....	...	1 3	3	...	...	...
Knauf, N., Estate, Grain .....	...	1 2	2	...	...	...
Luhm, Ernst, Machinery	1	3	3	...	1	12	
Ohlrogge, Gustav, Bolters	1	5	5	...	...	...
Vahldieck, A. W., Machines	1	2	2	...	1	20	
Totals	5	4 49	49	...	6	327	
CHELSEA, TAYLOR CO.—							
Rousseau & Shephard Co., Lumber	1	40	40	...	4	400	

*=Electric; †=Water; ‡=Gas; §=Hand; **=Leased.

ESTABLISHMENTS INSPECTED.

Location, Name and Business.	Buildings.		Employees.				Boilers.	
	Under 3 stories.	3 stories and over.	Male.	Female.	Total.	Under 16 yrs. of age.	Number.	Power.
CLEAR LAKE, POLK CO.—								
Abbott, F. B., Harness	1	1	2	2	2			\$
Clear Lake Creamery Co.	1	1	2	2	2		1	20
Clear Lake Star, Printing	1	1	1	1	1			†
Dahleen, E. M., Wagons	1	1	2	2	2			\$
Kenny & Hanson, Wagons	1	1	3	3	3			\$
Schultz, H. A., Planing	2	2	20	20	20		2	45
Totals	7	7	30	30	30		3	65
CLINTONVILLE, WAUPACA CO.—								
Clintonville Steam Laundry	1	1	2	3	5		1	10
Clintonville Tribune, Printing	1	1	2	2	4			†
Gilt Edge Creamery	1	1	1	1	1		1	20
Roehr Mfg. Co., Flour	1	1	30	30	30		2	120
Roehr, D. J., Planing	1	1	5	5	5			†
Zachow & Besserdich, Machines	1	1	3	3	3		1	15
Totals	4	2	43	5	48		5	165
COLFAX, DUNN CO.—								
Colfax Messenger, The, Printing	1	1	2	1	3			\$
Colfax Milling Co., Feed	1	1	5	5	5			†
Colfax Starch Factory, Starch	1	1	25	25	25		1	50
Crystal Creamery Co.	1	1	1	1	1		1	15
Fletcroft & Thompson, Elevators	1	1	3	3	3			†
Klinney Mercantile Co., Warehouse	1	1	2	6	8			\$
Northern Grain Co., Elevator	1	1	3	3	3			†
Totals	7	7	41	7	48		2	65
COLOMA STATION, WAUSHARA CO.—								
Vilas Follette Potato Warehouse, Storage.....	2	2	6	6	6			\$
COMBINED LOCKS, OUTAGAMIE CO.—								
Combined Locks Paper Co., Paper	4	4	224	6	230		10	1000
COMMONWEALTH, FLORENCE CO.—								
Commonwealth Mining Co., Mining	1	1	95	95	95			\$
CRANDON, FOREST CO.—								
Kempf Bros., Planing	1	1	12	12	12		1	50
Mills, Wm., Heading	2	2	20	20	20	2	1	50
Page & Landick Lumber Co., Saw Mill	2	2	60	60	60	3	3	250
Totals	5	5	92	92	92	5	5	350
CUDAHY, MILWAUKEE CO.—								
Cudahy Bros. Co., Packers	9	3	456	4	460	17	16	1260
Holthoff Machinery Co., Machinery	4	4	60	60	60		2	160
Total	13	3	516	4	520	17	18	1420
CUMBERLAND, BARRON CO.—								
Beaver Dam Lumber Co., Planing	2	2	34	1	35		6	580
Corbett, John, Wagons	1	1	2	2	2			\$
Cumberland Advocate, Printing	1	1	4	1	5			†
Cumberland Creamery Co.	1	1	1	1	1		1	8
Cumberland Milling Co., Flour	1	1	5	5	5		1	35
Kellermann, A. H., Tin	1	1	2	2	2			\$
Keyes & Cole, Staves	1	1	30	30	30	5	1	150
Peterson, P. H., Tin	1	1	2	2	2			\$
Wolf, August, Harness	1	1	3	3	3			\$
Totals	10	10	83	2	85	5	9	773
CURTISS, CLARK CO.—								
Curtiss Cheese Factory	1	1	2	2	2		1	8
Pribbenow, Albert, Saw mill	1	1	20	20	20	1	1	100
Totals	2	2	22	22	22	1	2	108

*—Electric; †—Water; ‡—Gas; §—Hand; **—Leased.

ESTABLISHMENTS INSPECTED.

Location, Name and Business.	Buildings.		Employees.				Boilers.	
	Under 3 stories.	3 stories and over.	Male.	Female.	Total.	Under 16 yrs. of age.	Number.	Power.
DARLINGTON, LAFAYETTE CO.—								
Badger State Mineral Water Co., Bottling.....	1		3		3			\$
Darlington Button Factory, Buttons.....	1		11		11			†
Darlington Elec. Lt. & Water P. Co., Light.....	1		3		3		1	250
McCarvills, J. A., Feed Mill.....	1		3		3			†
Totals.....	4		20		20		1	250
DARTFORD, GREEN LAKE CO.—								
Brooks, W. D., Boats.....	2		8		8		1	4
Green Lake Co. Reporter, Printing.....	1		3		3			**
Totals.....	3		11		11		1	4
DELAVAN, WALWORTH CO.—								
Delavan Enterprise, Printing.....	1		5	2	7			†
Delavan Light and Fuel Co., Light & Fuel.....	1	1	3		3			†
Delavan Republican, Printing.....	1		8	2	10			†
Delavan Water Works, Water.....	1		1		1		2	140
Reader, J. B., Wind Mill Co., Wind Mills.....	1		4		4		1	15
West End Creamery.....	1		1		1		1	20
Totals.....	6	1	23	4	27		5	335
DE PERE, BROWN CO.—								
American-Writing Paper Co., Paper.....		1	140	140	280	21	4	788
Democrat and Volksstern, Publishing.....	1		6	6	12			†
De Pere Light & Power Co., Light.....	1		3		3			†
De Pere News, The, Publishing.....	1		4		4			†
De Pere Steam Laundry.....	1		1	2	3		1	25
De Pere Tablet Co., The, Tablets.....	1		2	1	3			†
Dousman, John P., Milling Co., Flour.....	1	1	16		16			†
Lawton, C. A., & Co., Machines.....	1		32		32		1	30
Oneida Knitting Co., Knitting.....	1		2	10	12			†
Wing Sam, Laundry.....	1		1		1			\$
Totals.....	9	2	267	159	366	21	6	763
DODGEVILLE, IOWA CO.—								
City El. L. & Power House, Light, etc.....	1		2		2		2	140
Esch, W. P., Tubs.....	1		2		2			†
Johns, John F., Flour.....	1		2		2		1	40
Mitchell & Griffith, Creamery.....	1		2		2		1	20
Stratman, F. W., Wagons.....	2		20		20		1	30
Totals.....	6		28		28		5	230
DOWNING, DUNN CO.—								
Downing Creamery Co.....	1		3		3		1	15
Downing Wagon Co., Wagons.....	1		5		5			†
Totals.....	2		8		8		1	15
DOWNSVILLE, DUNN CO.—								
Knapp, Stout & Co., Planing.....	1		7		7		1	50
Massie, O. W., Creamery.....	1		2		2		1	15
Totals.....	2		9		9		2	65
DRESSER JUNCTION, POLK CO.—								
Madison, J. P., Creamery.....	1		3		3		1	16
DRUMMOND, BAYFIELD CO.—								
Drummond & S. W. Hy. Co., Round House.....	1		3		3		1	15
Rust Owen Lumber Co., Lumber.....	4		126		126		10	1340
Totals.....	5		129		129		11	1355
DUNDAS, CALUMET CO.—								
Dundas Butter & Cheese Co.....	1		2		2		1	16
Dundas Wooden Ware Co., Woodenware.....	1		25		25		1	45
Totals.....	2		27		27		2	61

*—Electric; †—Water; ‡—Gas; §—Hand; **—Lensed.

ESTABLISHMENTS INSPECTED.

Location, Name and Business.	Build-ings.		Employees.				Boilers.	
	Under 3 stories.	3 stories and over.	Male.	Female.	Total.	Under 16 yrs. of age.	Number.	Power.
DUNNVILLE, DUNN CO.—								
Dunnville Creamery Co.	1	...	2	...	2	...	1	15
Dunnville Stone Co., Stone	1	...	18	...	18	...	1	30
Ulmer, W. H., Sandstone	1	...	21	...	21	...	1	40
Totals	3	...	41	...	41	...	3	85
DURAND, PEPIN CO.—								
American Maltng Co., Elevator .....	...	1	2	...	2	...	1	30
Bauer & Breunig, Brewery	1	...	7	...	7	...	1	40
Bruenn, C., Wagons	1	...	3	...	3	...	1	10
Dorchester, J. F., Sr., Bricks	1	...	3	...	3	...	1	15
Dorwin, W. V., Flour .....	...	1	3	...	3	...	...	†
Durand Brewing Co., Brewery	2	...	7	...	7	...	1	40
Durand Elec. L. & P. Co., Light, etc.	1	...	3	...	3	...	...	†
Entering Wedge, Printing	1	...	2	...	2	...	...	†
Hill Bros., Feed	2	...	3	...	3	...	1	20
Pepin Co. Courier, Printing	1	...	3	...	3	...	...	†
Polzer, John, Planing	2	...	6	...	6	...	2	40
Preunn, C., Wagons	2	...	5	...	5	...	...	†
Totals	14	2	47	5	52	...	8	195
DWIGHT, POLK CO.—								
Mathison, J. P., Creamery	1	...	1	...	1	...	1	8
EAU GALLE, DUNN CO.—								
Durand Elec. L. & P. Co., Light	1	...	1	...	1	...	...	†
Tanner & Webb, Flour .....	...	1	3	...	3	...	...	†
Tarrant & Son, Creamery	1	...	2	...	2	...	1	20
Totals	2	1	6	...	6	...	1	20
EDGERTON, ROCK CO.—								
Burgess, F. F., Guns	1	...	2	...	2	...	...	†
City Steam Laundry	1	...	2	...	2	...	1	8
Conway Bros., Tob. Warehouse	1	...	15	...	55	70	...	†
Culton, C. L., Tob. Warehouse	1	...	10	...	40	50	...	†
Edgerton Engle, Printing	1	...	3	...	1	4	...	†
Freyer & Eisenlohr, Tob. Warehouse	1	...	...	16	16	3	...	†
Hanson, O. G., Tob. Stemming	1	...	5	...	25	30	1	...
McIntosh Bros., Tob. Warehouse	2	...	12	...	39	51	...	†
Marsden & Watson, Machines	1	...	5	...	5	...	...	†
Pomeroy, W. T., & Co., Tob. Warehouse	1	...	30	...	30	...	...	†
Schroeder & Arginnberg, Tob. Warehouse	1	...	6	...	24	30	...	†
Wis. Tobacco Reporter, Printing	1	...	4	...	4	...	...	†
Totals	13	...	94	202	296	4	1	8
EIDSVOLD, CLARK CO.—								
Nye, Lusk & Hudson, Saw Mill	2	...	35	...	35	...	3	150
ELCHO, LANGLADE CO.—								
Jones, G. W., Lumber Co., Saw Mill	2	...	60	...	60	...	3	200
ELKHORN, WALWORTH CO.—								
Blade, The, Printing	1	...	1	...	1	...	...	†
Elkhorn E. L. & Water Co., Light, etc.	1	...	3	...	3	...	2	150
Elkhorn Planing Mills, Planing	1	...	2	...	2	...	1	20
Elkhorn Steam Laundry	1	...	1	...	2	...	1	10
Independent, The, Printing	1	...	2	...	5	...	...	†
Wis. Butter & Cheese Co., Creamery	1	...	3	...	3	...	1	25
Totals	6	...	12	8	20	...	5	205
ELK MOUND, DUNN CO.								
Elk Mound Creamery Co.	1	...	2	...	2	...	1	12
Wis. Elevator Co., Elevator .....	...	1	2	...	2	...	...	†
Totals	1	1	4	...	4	...	1	12

*—Electric; †—Water; ‡—Gas; §—Hand; **—Leased.

ESTABLISHMENTS INSPECTED.

Location, Name and Business.	Buildings.		Employees.				Boilers.	
	Under 3 stories.	3 stories and over.	Male.	Female.	Total.	Under 16 yrs. of age.	Number.	Power.
ELLSWORTH, PIERCE CO.—								
Bowen, J. T., Tin	1		5		5			\$
Buck Bros. Light and Power	1				2		1	100
Ellsworth Brewing Co., Brewery	1		5		5		1	40
Ellsworth Iron Works, Foundry	1		2		2			†
Ellsworth Mfg. Co., Baskets	1		20		20		1	30
Ellsworth Mfg. Co., Saw Mill	1		16		16		2	128
Ellsworth Record, Printing	1		2	1	3			‡
Erickson, E. J., Furnaces	1		2		2			‡
Foss Armstrong Hardware Co., Tin Shop	1		2		2			‡
Fresse, Charles, Harness	1		2		2			‡
Hines, F. W., Elevator	1		4	1	5			‡
Moe, Ole, Feed	1		2		2		1	22
New Richmond Roller Mill Co., Elevator		1	4		4			‡
Pierce Co. Herald, Printing	1		3		3			‡
Reynolds, W. C., Wagons	1		2		2			‡
Vanderwater's Saw Mill, Saw Mill	1		7		7		2	120
Wentzel, J., Wagons	1		3		3			‡
Totals	16	1	83	2	85		8	440
FORT ATKINSON, JEFFERSON CO.—								
City Brewery, Brewing	1		4		4		1	35
City Water & Light Plant, Water	1		3	1	4		2	200
Cornish, Curtis & Greene Mfg. Co., Mach'y	3		98	2	100		2	220
Ft. Atkinson Canning Co., Canning	1		100	50	150	50	2	80
Fort Laundry	1		4	3	7		1	12
Hoard's Creamery	2		9	3	12		2	50
Northwestern Mfg. Co., Chairs	3	4	209	16	225	3	2	210
Pettinger, W. A., Feed	1		2		2			‡
Pounder, G. H., Harrows	1		8		8		1	4
Wilcox & Morris Co., Elevator	1	1	8	1	9		1	55
Zeugner, Hoffmann & Son, Wood	1		7		7		1	45
Totals	16	5	452	76	528	53	15	947
GERMANIA, MARQUETTE CO.—								
Germania Butter Co., Creamery	1		3		3		1	30
GILE, IRON CO.—								
Montreal River Lbr. Co., Saw Mill	2		175		175	10	8	750
Ottawa Mine, Iron	1		56		56	2	2	300
Totals	3		231		231	12	10	1050
GLEN FLORA, GATES CO.—								
Star, The, Printing	1		2		2			‡
Stoker Bros., Saw Mill	1		14		14		1	45
True, H. W., Saw Mill	1		40		40		2	130
Totals	3		56		56		3	175
GLIDDEN, ASHLAND CO.—								
Glidden Veneer Co., Veneer	4		80		80	15	3	180
Rogers & Emmons Lbr. Co., Saw Mill	1						2	120
Tyler, D., Water	1		1		1		1	30
Totals	6		81		81	15	6	330
GLENWOOD, ST. CROIX CO.—								
Cleveland, R. A., Planing	1		12		12	1	1	50
Glenwood Mfg. Co., Heading	4		50		50	2	4	220
Glenwood Roller Mills, Flour	1		4		4		1	40
Glenwood Tribune, Printing	1		2	2	4			‡
Glenwood Water Works, Pumping	1		1		1			‡
Hogrefe Butter and Cheese Co., Cheese	1		2		2		1	15
Totals	9		71	2	73	3	7	325

*—Electric; †—Water; ‡—Gas; §—Hand; **—Leased.

ESTABLISHMENTS INSPECTED.

Location, Name and Business.	Build-ings.		Employees.				Boilers.	
	Under 3 stories.	3 stories and over.	Male.	Female.	Total.	Under 16 yrs. of age.	Number.	Power
GRAND RAPIDS, WOOD CO.—								
Badger Box & Lumber Co., Boxes	1							*
Electric & Water Co., Light and Power	1		5		5		2	200
Grand Rapids Foundry Co., Machinery	1		24		24			†
Grand Rapids Lumber Co., Saw Mill	1		82		82		6	250
Grand Rapids Milling Co., Flour	1		11		11			†
Grand Rapids Pulp & Paper Co., Pulp and P.	1		77	8	85		3	375
Grand Rapids Table Co., Tables		2	9		9	2	1	65
Grand Rapids Tribune, Printing	1		2	2	4			†
Grand Rapids Water Works	1		2		2		1	40
Kellogg Bros. Lumber Co., Lumber	1		3	1	4		1	50
MacKinnon, F., Mfg. Co., Wagon Stock	1		65	1	66	4	1	100
Overbeck Bros., Mfg. Co., Furniture	1	1	104	1	105	7	2	150
Pioneer Wood Pulp Co., Pulp, etc.	1		12		12		2	50
Riverside Steam Laundry	1		5	2	7		1	30
Wood Co. Reporter, Printing	1		3	2	5			‡
Totals	14	3	469	17	426	13	20	1310
GRANTSBURG, BURNETT CO.—								
Armstrong & Hammerstrom, Saw Mill, etc.	1		5		5		1	35
Burnett Co. Sentinel, The, Printing	1		5		5			‡
Farmers' Starch Co., Starch	1		9		9		2	120
Grantsburg Creamery Co.	1		4		4		1	15
Grantsburg Excelsior Co., Excelsior	2		10		10		1	90
Grantsburg Mfg. Co., Machinery	1		5		5		1	30
Grantsburg Starch Co., Starch	1						1	80
Hickerson Roller Mill, Flour	1		6		6			†
Journal of Burnett Co., Printing	1		6		6			†
Terra Cotta Brick Co., Bricks	1		14		14		1	30
Totals	11		64		64		8	400
HAMMOND, ST. CROIX CO.—								
Gower Creamery Co.	1		4		4		1	20
Hammond News, The, Printing	1		1	1	2			‡
Hammond Water Works, Water	1		1		1			†
Hanson Bros., Elevator	1		3		3			†
Lightner, C., Feed	1		2		2		1	30
New Richmond Roller Mills, Elevator	1		2		2			†
Northwestern Tow Co., Tow	1		12		12		1	100
Wis. Elevator Co., Elevator	1		2		2			†
Totals	8		27	1	28		3	158
HARTFORD, WASHINGTON CO.—								
Badger Laundry	1		2	1	3		1	12
Hartford Machine Shop, Machinery	1		2		2			†
Hartford Plow Works, Plows	2		23	1	24		1	85
Hartford Press, Printing	1		2		2			†
Hartford Roller Mills, Flour	1		3		3		1	60
Hartford Tannery, Tannery and Gloves	1		4	3	7		1	20
Hartford Times, Printing	1		4		4			†
Konrad Bros. & Werner, Maltsters	2	1	10		10		1	40
Nehrbass Casket Co., Caskets	2		13	1	14		1	80
Place, W. B., & Co., Tannery	1		5		5		1	20
Portz Bros., Maltsters	1		6		6		2	100
Schwartz, Jos., Brewing Co., Brewery	1		5		5		1	40
Uber Bros., Gloves	2		27	13	40			†
Totals	12	4	106	19	125		10	457
HAWKINS, GATES CO.—								
Ellingson Lumber Co., Saw Mill	1		40		40		3	180

*—Electric; †—Water; ‡—Gas; §—Hand; **—Leased.

ESTABLISHMENTS INSPECTED.

Location, Name and Business.	Buildings.	Employees.			Boilers.		
	Under 3 stories and over.	Male.	Female.	Total.	Under 16 yrs. of age.	Number. Power.	
HAWTHORNE, DOUGLAS CO.—							
Bunnell, Thomas, Saw Mill	1	4		4		3 240	
C., St. P., M. & O. R. R., Pumping	1	1		1		1 10	
Queal, J. H., & Co., Planing	1	20		20		1 20	
Totals	3	25		25		5 270	
HAYWARD, SAWYER CO.—							
Hall, Linden & Co., Tin	1	1		1		\$	
Hayward Enterprise, Printing	1	3		3		\$	
Hayward Republican, Printing	1	2	1	3		†	
Hayward Water Works, Pumping	1	3		3		2 90	
Moveland & Pugh, Tin	1	2		2		\$	
New Richmond Roller Mill Co., Feed	1	1	4	4		1 40	
North Wis. Lumber Co., Saw Mill	2	217		217	5	11 1240	
Hines Lumber Co., Lumber	2	250		250	13	10 950	
Totals	10	482	1	483	18	24 2310	
HAZELHURST, ONEIDA CO.—							
Yawkey Lumber Co., Lumber, etc.	5	225		225	4	5 480	
HORICON, DODGE CO.—							
Firehammer, C. Sons & Co., Planing	1	15		15		1 20	
Horicon Reporter, Printing	1	3		3		†	
Horicon Steam Laundry	1	1	3	4		1 10	
Horicon Wagon Works, Wagons	1	8		8		†	
Horicon Wind Mill Co., Wind Mills	1	4		4		1 20	
Van Brunt Mfg. Co., Agri. Imp.	4	250		250		2 135	
Totals	9	281	3	284		5 185	
HORTONVILLE, OUTAGAMIE CO.—							
Buckman Bros., Flour	1	3		3		1 45	
Delstler Co., The, Planing	1	20		20		1 85	
Hortonville Brewing Co., Brewery	1	3		3		1 25	
Weekly Review, Printing	1	2		2		\$	
Totals	3	26	2	28		3 155	
HOUGHTON, BAYFIELD CO.—							
Prentice Brown Stone Co., Stone	2	20		20		1 35	
HUDSON, ST. CROIX Co.—							
Artesian Brewery, Brewing	1	3		3		1 13	
Cassanova Bros., Brewery	1	4		4		1 20	
Central Lumber Co., Saw Mill	2	120		120		6 350	
C., St. P., M. & O. Ry. Co., Round House	6	261		261		4 600	
C., St. P., M. & O. Ry. Co., Sand and Coal	1	2		2		\$	
City Water Works, Pumping	1	1		1		2 100	
Crosby, E. A., Furnace	1	2		2	1	\$	
Crosby, G. J., Bicycles	1	1		1		\$	
Enterprise Steam Laundry	1	2	2	4		1 10	
Hanson, Christ, Wagons	1	4		4		\$	
Hennessy, John, Harness	1	3		3		\$	
Hosford, George K., Elevator, etc.	1	2		2		†	
Hudson Produce Co., Storage	1	1	22	14	36	2	†
Hudson Star Times, Printing	1	4	2	6		†	
Interstate Box & Mfg. Co., Boxes	1	2	29	9	38	2	2 100
St. Croix Observer, Printing	1	3	1	4		†	
Schattschneider, C. F., Repair Shop	1	2		2	1	\$	
True Republican, Printing	1	1	2	3		†	
Williams, O. J., & Co., Tin	1	2		2		\$	
Totals	24	4	468	30	498	6 17 1193	

*—Electric; †—Water; ‡—Gas; §—Hand; **—Leased.

ESTABLISHMENTS INSPECTED.

Location, Name and Business.	Build- ings.	Employees.				Boilers.	
		Under 3 stories and over.	Male.	Female.	Total.	Under 16 yrs. of age.	Number. Power.
HURLEY, IRON CO.—							
Harmony Iron Co., Iron	3	60	60	2	3	450	
Hurley Boiler Works, Boilers	1	5	5				
Hurley Bottling Works, Bottling	1	2	2				
Minnewawa Mine, The, Iron	1	10	10			150	
Odanah Iron Co., Iron	3					720	
Twin City Iron Works, Foundry, Etc.	1	13	14			30	
Totals	10	90	91	2	12	1350	
INGRAM, GATES CO.—							
Bedard, F., Planing Mill	1	2	2			20	
Ostrander, H. A., & Co., Saw Mill	1	7	7			100	
Totals	2	9	9		3	120	
IRON BELT, IRON CO.—							
Iron Belt Mining Co., Iron	1	105	105	5	4	350	
Oliver Mining Co., Iron	3	330	330	1	4	540	
Totals	4	435	435	6	8	890	
IRON RIVER, BAYFIELD CO.—							
Alexander Edgar Lumber Co., Saw	3	368	368		6	580	
Iron Riv. Water, Lt. & Pow. Co., Water, etc.	1	3	3		2	100	
Totals	4	371	371		8	680	
IRVINGTON, DUNN CO.—							
Coffin Box & Lumber Co., Baskets.....	3	128	128	30	3	140	
Lowrie, N. J., Cheese	1	2	2		1	12	
Totals	4	130	130	30	4	152	
JEFFERSON, JEFFERSON CO.—							
Ambrose, F. O., Machinery, etc.	1	6	6			†	
City Brewery, Brewing	1	26	27		2	160	
City Elect. Lt. & Water Wks. Co., Light, etc.	1	4	4		2	200	
Copeland & Ryder Co., The, Shoes	1	83	112	1	2	100	
Fernholtz Lumber Co., Doors, etc.	1	19	20	1	1	45	
Troeger, George, Tannery	1	5	5		1	40	
Haubenschild, A., Wagons	1	2	2		1	6	
Hyde Leather Co., Tannery	1	10	10		1	25	
Jefferson Brewing & Malting Co., Brewery...	1	4	4		1	10	
Jefferson Flour Mills, Flour	1	4	4			†	
John & Beck Shoe Co., Shoes	1	7	8			†	
Lytle-Stoppenbach, Elevator	1	2	2			35	
Lytle-Stoppenbach Co., Maltsters	1	3	10		3	185	
Metzers, M. C., Mrs., Marble	1	2	2		1	15	
Nels, Leonard, Marble	1	2	2			†	
Riverside Creamery	1	3	3		1	30	
Rock Valley Creamery	1	2	2		1	15	
Stoppenbach Bros., Packing	1	1	30	30	1	80	
Vaughn, O. C., Mfg. Co., Wagons	1	24	25	1	1	65	
Wis. Mfg. Co., Chairs	2	22	23		1	100	
Totals	18	7	266	35	301	3	21111
JEWETT, ST. CROIX Co.—							
Northern Grain Co., Elevator	1	2	2			†	
JUNEAU, DODGE CO.—							
Brieman Roller Works, Boilers	1	6	6		1	12	
City Roller Mill, Flour	1	5	5		1	80	
Downing, L. & Co., Paint	1	3	3		1	10	
Juneau Creamery	1	1	1		1	20	
Lytle-Stoppenbach Co., Elevator	1	1	2			†	
Peters Furniture Co., Furniture, Etc.....	3	31	32	1	1	60	
Reul, John F., Wind Mills	1	4	4		1	16	
Totals	8	1	52	1	53	1	6198

*—Electric; †—Water; ‡—Gas; §—Hand; **—Leased.

FACTORY INSPECTION.

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ESTABLISHMENTS INSPECTED.

Location, Name and Business.	Build-ings.	Employees.			Boilers.	
		Under 3 stories.	3 stories and over.	Male. Female. Total.	Under 16 yrs. of age.	Number. Power.
KIEL, MANITOWOC CO.—						
Kiel Mfg. Co., Tables	2	2	75	75	2	175
Kiel Woodenware Co., Woodenware	1	1	65	65	3	90
Meyer, Wm., Flour	1	1	4	4	1	30
Totals	3	2	144	144	3	296
KILBOURN, COLUMBIA CO.—						
City Water Works, Water	1	1	2	2	1	100
Kilbourn Machine Co., Machinery, etc.	1	1	7	7	1	25
Kilbourn Steam Laundry	1	1	2	3	1	8
Marshall, G. M., Repairs	1	1	1	1	1	†
Mirror Gazette, The, Printing	1	1	2	1	3	‡
Totals	5	5	14	4	3	133
KIMBALL, IRON CO.—						
Kimball & Clark, Lumber	2	2	45	45	2	150
KIMBERLY, OUTAGAMIE CO.—						
Kimberly & Clark Co., Paper	3	2	199	1	200	5 725
KINGSTON, GREEN LAKE CO.—						
Gold Edge Creamery, Butter	1	1	3	3	1	20
O'Brian & Moore, Flour and Feed.	1	1	3	3	†	†
Totals	2	2	6	6	1	20
KNAPP, DUNN CO.—						
Bush, F. H., Creamery	1	1	2	2	1	15
Fletcher & Townsend, Feed	1	1	3	3	†	†
Totals	2	2	5	5	1	15
KNOX MILLS, PRICE CO.—						
Bradley, W. H., Saw Mill	2	2	15	15	2	1 65
LAC DU FLAMBEAU, VILAS CO.—						
Lac du Flambeau Lumber Co., Lumber	3	3	350	350	2	7 670
LADYSMITH, GATES CO.—						
Corbett, R., Saw Mill	1	1	25	25	1	50
Gates Co. Journal, Printing	1	1	2	1	3	†
Menasha Paper Co., Pulp	1	1	30	30	7	†
Menasha Woodenware Co., Saw Mill.	2	2	80	80	5	2 250
Weekly Budget, Printing	1	1	2	1	3	‡
Totals	6	6	139	2	141	12 3 300
LAKE GENEVA, WALWORTH CO.—						
Equitable Electric Light Co., Light.	1	1	4	4	2	200
Herald, The, Printing	1	1	3	3	†	†
Lake Geneva Creamery	1	1	2	2	1	40
Lake Geneva News, Printing	1	1	3	1	4	†
Lake Geneva Water & Light Co., Light, etc.	1	1	3	3	2	200
Steam Laundry	1	1	1	2	3	1 16
Totals	6	6	16	3	19	6 456
LAKE NEBAGEMAN, DOUGLAS CO.—						
Nebageman Lumber Co.	5	5	230	230	5	5 600
LANCASTER, GRANT CO.—						
Barrows, Wm., Brick	1	1	10	10	†	†
Brooke Bros., Planing	1	1	4	4	**	**
Grebe, Edgar, Flour	1	1	2	2	1	80
Hurshberger, John G., Light	1	1	3	3	2	200
Lancaster Lumber Co., Lumber	1	1	5	5	†	†
McDonald, Thomas, Bridges, etc.	1	1	4	4	†	†
Schuster, Wm. Flour	1	1	2	2	†	†
Totals	6	1	30	30	3	280

*—Electric; †—Water; ‡—Gas; §—Hand; **—Lensed.

ESTABLISHMENTS INSPECTED.

Location, Name and Business.	Build-ings.		Employees.				Boilers.	
	Under 3 stories.	3 stories and over.	Male.	Female.	Total.	Under 16 yrs. of age.	Number.	Power.
LE CLAIR, DOUGLAS CO.—								
Bright & Cheney, Saw Mill	2		30		30		3	230
LITTLE CHUTE, OUTAGAMIE CO.—								
Little Chute Pulp Co., Pulp	2		75		75			†
Zeeland Flour Mills, Flour	1		2		2			†
Totals	3		77		77			
LITTLE FALLS, POLK CO.—								
Wisconsin Dairy Co., Creamery	1		2		2		1	25
MANCHESTER, GREEN LAKE CO.—								
Manchester Roller Mill, Flour	1		5		5			†
Star Creamery	1		3		3		1	16
Totals	2		8		8		1	15
MARENGO, ASHLAND CO.—								
Walford Brick & Lumber Co., Brick, etc.....	1		20		20		1	60
MARKESAN, GREEN LAKE CO.—								
H. P. Friday, Creamery	1		3		3		1	20
H. W. Lang, Wagons	2		4		4			†
Totals	3		7		7		1	20
MARQUETTE, GREEN LAKE CO.—								
Glit Edge Cheese Co.	1		3	1	4		1	10
MASON, BAYFIELD CO.—								
White River Lumber Co., Saw Mill	3		176		176	3	11	1100
MAUSTON, JUNEAU CO.—								
Mauston Elec. Light & Power Co., Light & P.	1		2		2		1	150
Mauston Milling Co., Flour		1	4	1	5			†
Mauston Steam Laundry	1		2	1	3		1	12
Mauston Waterworks	1		2		2		1	60
F. Radell & Co., Wagons	1		3		3		1	16
Juneau County Chronicle, Publishers.....	1		3		3			‡
S. Severance, Repair Shop	1		1		1			†
F. A. Underwood, Cooper	1		4		4		1	12
Totals	7	1	21	2	23		5	250
MAYVILLE, DODGE CO.—								
American Bottle Cover Factory, Bottle Covers	1		4	8	12		1	5
Buerger Malting Co., Maltsters		2	13		13		2	180
Dodge County Banner, Publishers	1		6		6	1		†
Dodge County Pioneer, Publishers	1		5		5			†
Hollenstein, J., Wagons	1		8		8		1	18
Mayville Foundry & Machine Shop, Foundry	1		3		3		1	20
Mayville Furniture Co., Spinning Wheels.....	1		5		5		1	30
Mayville Roller Mills, Flour		1	2		2		1	100
Mayville Saw Mill, Lumber	1		2		2			†
Mayville Steam Laundry	1		1	1	2			**
Rock Riverside, Creamery	1		2		2		1	15
M. Ziegler Brewing Co., Brewery	1		4		4		1	20
Totals	10	3	55	9	64	1	9	388

*—Electric; †—Water; ‡—Gas; §—Hand; **—Leased.

ESTABLISHMENTS INSPECTED.

Location, Name and Business.	Build- ings.	Employees.				Boilers.	
		Under 3 stories and over.	Male.	Female.	Total.	Under 16 yrs. of age.	Number. Power.
MEDFORD TAYLOR CO.—							
City Printing Office, Printing	1	1	1	2			\$
Campbelle & Anschutz, Foundry	1	15		15		1	40
Democrat Printing Co., Printing	1	2		2			‡
Der Waldbote, Printing	1	3	2	5			‡
Electric Light Wks., Light and Power	1	3		3		1	60
Medford Brewery, Brewery	2	10		10	2	1	45
Medford Mfg. Co., Lumber	4	65		65		5	360
Medford Roller Mill, Flour		1	7	7			75
Pollard & Son, O. D., Sash, etc.	1	8		8	6	1	50
Star & News, Printing	1	3	1	4			‡
U. S. Leather Co., Tannery	4	99	1	100			
Wesle Bros., Carriages	1	13		13		1	12
Zwingrebel, Wagons	1	4		4			\$
Totals	19	1	233	6	238	8	11 642
MELLEN, ASHLAND CO.—							
Foster, Geo. E., Lumber Co., Saw Mill	2		75	75	2	3	*450
U. S. Leather Co., Tannery	4	100		100	1	6	450
Mullen Weekly, Publishing	1	1	1	2			‡
Total	7	176	1	177	3	9	900
MERCER, IRON CO.—							
Mercer Lumber Co., Lumber	1		35	35		2	80
MERIDIAN, DUNN CO.—							
Meridian Creamery Co.	1		2	2		1	20
MILTON, ROCK CO.—							
Geo. C. Mansfield & Co., Creamery	1		1	1		1	15
Milton Journal, Publishers	1		1	2	3		‡
Totals	2		2	2	4	1	15
TOWN OF MILWAUKEE, MILWAUKEE CO.—							
Milwaukee Cement Co., Cement	5	1	48	48		2	250
Milwaukee Cement Co., Cement	6	1	132	132		4	500
Totals	11	2	180	180		6	750
MINERAL POINT, IOWA CO.—							
Mineral Point Zinc Co., Zinc, etc.	9		246	4	250		4 400
American Steam Laundry	1		2	2	4		1 12
Mineral Point El. Light & Water Plant, Light	1		2	2	2		2 240
Mineral Spring Brewing Co., Brewery	1		5	5		1	80
Union Fibre Co., Asbestos	2		7	7		1	60
J. C. Martin, Feed	1		2	2		1	15
Spensley & Hoare, Creamery	1		2	2		1	12
Totals	16		264	6	270	11	819
MINOCQUA, VILAS CO.—							
City Water Works	1		1	1		1	40
MONTELLO, MARQUETTE CO.—							
Montello Creamery	2		3	3		1	30
Montello Granite Co., Monuments	2		130	130		1	80
Totals	10		133	133		2	110
MONTREAL, IRON CO.—							
Montreal Iron Co.	2		225	225	4	5	600
MORSE, ASHLAND CO.—							
Chase, F. B., Lumber	2		61	1	62	3	3 180
NASH, BAYFIELD CO.—							
Ashland, Sicklwith & Iron Ry., R. R. Shops..	2		25	25	1	1	50

ESTABLISHMENTS INSPECTED.

Location, Name and Business.	Build-ings.		Employees.			Boilers.	
	Under 3 stories.	3 stories and over.	Male.	Female.	Total.	Under 16 yrs. of age.	Number. Power.
NEENAH, WINNEBAGO CO.—							
Aylward, W., & Son, Stoves and Foundry.....	1	...	9	...	9	...	1 25
Bergstrom Bros. & Co., Stoves	1	...	58	...	58	...	1 85
Daily News, Printing	1	...	4	3	7	...	* *
Daily Times, Printing	1	...	5	...	5	...	†
Fox River Valley Gas & Elec. Co., Light.....	1	...	2	...	2	...	2 160
Jamieson, Robt., Machine Shop	1	...	3	...	3	...	**
Jersild Knitting Co., Knitting	1	...	3	35	38	3	†
Kimberley & Clark Co., Paper	3	1	100	33	133	2	4 550
Krueger & Lachman Milling Co., Flour .....	...	1	10	...	10	...	1 150
Neenah Boot & Shoe Mfg. Co., Shoes .....	...	1	24	16	40	2	†
Neenah Brewery	1	...	2	...	2	...	...
Neenah Canning Factory, Canning	2	...	10	30	40	8	1 40
Neenah Paper Co., Paper	1	...	46	20	60	...	2 500
Nelson Bros., Machines	1	...	5	...	5	...	†
E. F. Wiekert Co., Sash, etc.	2	1	21	...	21	1	1 65
Winnebago Paper Co., Paper	1	...	50	25	75	...	3 375
Totals	18	4	346	162	508	17	16 1940
NEILLSVILLE, CLARK CO.—							
Neillsville Novelty Co., Bee Hives, etc.....	2	...	2	...	2	...	1 35
Wis. Furniture Mfg. Co., Furniture	5	1	74	1	75	7	2 160
Totals	7	1	76	1	77	7	3 195
NEKOOSA, WOOD CO.—							
Nekoosa Paper Co., Paper, etc.	4	2	376	12	388	...	7 1350
NESHKORO, MARQUETTE CO.—							
Neshkoro Plow & Sleigh Works, Plows, etc....	3	...	7	...	7	...	†
Pond Lily Flour Mill, Flour	3	...	4	...	4	...	†
Wells Saw Mill	1	...	7	...	7	...	†
Wells Woolen Co., Yarns, etc.	2	...	2	8	10	...	†
Totals	9	...	20	8	28	...	...
NEW HOLSTEIN, CALUMET CO.—							
C. F. Dumke & Co., Flour and Feed.....	1	...	3	...	3	...	1 75
Greves & Iverson, Elevator .....	...	1	2	...	2	...	†
John Lawson Mfg. Co., Boilers	1	...	10	...	10	...	†
New Holstein Canning Co., Canning	1	...	80	20	100	...	2 130
H. C. Timm Co., Grain .....	...	1	3	...	3	...	†
Totals	3	2	98	20	118	...	3 205
NEW LISBON, JUNEAU CO.—							
Henry Blerbauer, Brewery	3	...	5	...	5	...	1 12
Juneau Argus, Publishers	1	...	2	...	2	...	†
Totals	4	...	7	...	7	...	1 12
NEW LONDON, WAUPACA CO.—							
Andrae, H. G., Co., Furniture	2	...	70	...	70	10	3 150
Foote, A. D., Co., Flour .....	...	1	10	...	10	...	1 75
Knapsteln, Theo., & Co., Brewery.....	...	2	8	...	8	...	1 35
Melklejohn & Hatton Lumber Co., Lumber	3	...	73	2	75	...	5 200
Madson, H. P., Machine Shop	1	...	1	...	1	...	1 10
New London Elec. Light Co., Light.....	1	...	2	...	2	...	2 150
New London Iron Works, Machines	1	...	1	...	1	...	†
New London Press, Publisher	1	...	1	2	3	...	†
New London Republican, Publisher	1	...	3	2	5	...	†
Page & Lyon Mfg. Co., Bee Hives	2	...	39	1	40	...	1 60
Totals	12	3	208	7	215	10	14 690

*—Electric; †—Water; ‡—Gas; §—Hand; **—Leased.

ESTABLISHMENTS INSPECTED.

Location, Name and Business.	Build-ings.		Employees.			Boilers.	
	Under 3 stories.	3 stories and over.	Male.	Female.	Total.	Under 16 yrs. of age.	Power.
N. L. RICHMOND, ST. CROIX CO.—							
Dimmick, E. J., Wagons, etc.	1		2		2		†
Early, Chas. M., Harness	1		2		2		†
Finn, Thos., Wagon Shop	1		2		2		†
Harrington, T., Wagons	1		2		2		†
Jagers, H. M., Novelty Wks., Novelties	1		2		2		†
Johnson, T. M., Harness	1		2		2		†
McGrath, W. M., Wagons, etc.	1		2		2		†
New Richmond Dairy Co., Cheese	1		2		2	1	10
New Richmond Elec. Lgt. & Power Co.	1		2		2	2	120
New Richmond Roller Mills, Flour	3	2	28	1	29		†
Odgers, Wm., Machine Shop	1		2		2	1	65
Padden & Hughes, Tin	1		2		2		†
Republican Voice, Printing	1		5		5		†
Tracer & Barrett, Wood Work, etc.	1		15		15		†
Willow River Lumber Co., Saw Mill, etc.	2		89	1	90	2	160
Totals	18	2	164	2	166	6	355
NYE, POLK CO.—							
Mattison, J. P., Creamery	1		2		2	1	12
OASIS, WAUSHARA CO.—							
Oasis Creamery, Butter	2		2		2	1	25
ODANAH, ASHLAND CO.—							
Odanah Iron Co., Iron	4		300		300	9	2 300
Stearns, J. S., Lumber Co., Saw Mill, etc.	5		287	7	294	7	5 600
Totals	9		587	7	594	16	7 900
OGEMA, PRICE CO.—							
Ogema Lumber Co., Lumber	2		20		20	2	300
ONALASKA, LA CROSSE CO.—							
Nichols, C. H., Lumber Co., Lumber	3		19		19	1	125
Onalaska Woolen Mfg. Co., Woolens	1		6	4	10	1	15
Totals	4		25	4	29	2	140
OSCEOLA, POLK CO.—							
Bethama Mineral Springs, Bottling	1		12	1	13		†
Corey Bros., Elevator	1		5		5	1	25
Ladd, C. C., Flour	2	1	12		12		†
Mattison, J. P., Creamery	1		2		2	1	20
Mealey, S. J., Starch	1		15		15	1	80
Negler, Hillskatter & Brandt, Feed	1		8		8		†
Northern Supply Co., Elevator	1		2		2		†
Osceola Sun, Printing	1		2	1	3		†
Polk Co. Press, Printing	1		4		4		†
Totals	10	1	62	2	64	3	125
OWEN, CLARK CO.—							
Owen, John S., Lumber Co., Saw Mill	3		219	1	220	4	4 350
OXFORD, MARQUETTE CO.—							
Oxford Flouring Mill, Flour and Feed	2		4		4		†
PACKWAUKEE, MARQUETTE CO.—							
Packwaukee Flour & Feed Mill, Flour and F.	3		4		4		†

ESTABLISHMENTS INSPECTED.

Location, Name and Business.	Build- ings.	Employees.			Boilers.	
	Under 3 stories. 3 stories and over.	Male.	Female.	Total.	Under 16 yrs. of age.	Number. Power.
PARK FALLS, PRICE CO.—						
Flambeau Paper Co., Paper	3	83		83	7	1500
Herald, Publishing	1	2	1	3		†
Sherry Henry, Planing	2				2	130
Smith & Osborn, Saw Mill	1				1	85
Stewart, Greenfield & Key, Heading	1	18		18	1	1
Winnebago Realty, Shingles	1	40		40		80
Williams & Libby, Saw Mill	2	65		65	3	210
Totals	11	208	1	209	4	14110
PENCE, IRON CO.—						
Hennepin Mining Co., Iron	1	80		80	2	200
PESHIGO, MARINETTE CO.—						
Peshigo Flour Mill Co.	1	2	1	3		†
Peshigo Lumber Co.	2	120		120	5	500
Peshigo Times, Printing	1	2		2		†
Wis. & Mich. Ry. Co., Repair Shops	4	40		40	1	60
Yip Gin, Laundry	1	1		1		†
Totals	8	165	1	166	6	560
PETERSBURG, CRAWFORD CO.—						
Clover Leaf Cheese & Butter Assn., Creamery	1	1		1	1	8
Keough Mfg. Co., Excelsior	1	12		12	1	70
Totals	2	13		13	2	78
PHILLIPS, PRICE CO.—						
Bee, The, Printing	1	3	1	4		†
Davis Lumber Co., J. R., Lumber	5	250		250	10	101120
Miller, Geo. R., Saw Mill	1	30		30		1
Phillips Times, The, Printing	1	3		3		†
U. S. Leather Co., Tannery	3	45		45	12	1200
Totals	11	331	1	332	10	23290
PLAINFIELD, WAUSHARA CO.—						
Plainfield Creamery	3	3		3	1	25
Plainfield Flour and Feed Mill, Flour, etc.	3	6		6	1	80
Totals	6	9		9	2	105
PLATTEVILLE, GRANT CO.—						
Baker Bros., Machinery	1	2		2		†
Crystal Steam Laundry	1	3	2	5	1	8
Grindell, John, Brick	1	10		10	1	35
Hoppe, F., Brewery	1	8		8	1	60
Perry, N. E., Candy	1	2		2		†
Clapp, J. D., Butter Tubs	1	6		6	1	6
Platteville Canning Co., Cannery	1					
Platteville Cheese and Produce Co., Creamery	1	4		4	1	20
Platteville Elec. Lt. & Power Co., Lt. etc.	1	3		3	2	160
Platteville Lead & Zinc Co., Lead and Zinc	1	30		30	4	122
Platteville Water Works	1	2		2	2	205
Schmelker Lead & Zinc Co., Lead and Zinc	1	8		8	1	15
Schroeder, W. F., Feed	1	3		3		130
Totals	13	79	4	83	4	10154

* Electric; † Water; ‡ Gas; § Hand; ** Leased.

ESTABLISHMENTS INSPECTED.

Location, Name and Business.	Buildings.		Employees.			Boilers.	
	Under 3 stories.	3 stories and over.	Male.	Female.	Total.	Under 16 yrs. of age.	Number. Power.
PORTAGE, COLUMBIA CO.—							
Buckley & Lelsch, Tailors	1		12	3	15		...
C., M. & St. P. Round House	2		9		9		1
Epstein Bros., Brewery	1		2		2		1 20
Eulberg Bros., Brewery	1		9		9		1 60
Falconer & Boynton Mfg. Co., Clothing	1		3	14	17		**
Hanley & Beckerjeck, Laundry	1		3	6	9		1 20
Jork, J. W., Flour	1	1	8		8		2 150
Portage Democrat, Publisher	1		7	4	11		†
Portage Elec. Plant, Light and Power	1		3		3		2 150
Portage Hosiery Plant, Mfg., etc.	2		34	98	132	9	1 85
Portage Underwear Co., Underwear	1		4	28	32	1	1 15
Portage Water Works	1		2		2		2 100
Wisconsin Rundschau, Publisher	1		2		2		†
Wis. State Reg. & Portage Daily, Pub.	1		6	5	11		†
Totals	15	1	104	158	262	10	12 650
PORT EDWARDS, WOOD CO.—							
Edwards, John, Mfg. Co., Paper	1		142	5	147		6 720
PORT WASHINGTON, OZAUKEE CO.—							
Barth Bros. Mfg. Co., Tables	2		46		46		1 70
Crystal Laundry	1		2	1	3		†
Gilson Mfg. Co., Foundry and Machinery	2		100		100	1	2 85
Martin & Wester, Plows	1		3		3		1 15
Mueller, Chas. A., Tanners	1	1	30		30		2 150
Port Washington Foundry Co., Foundry	1		50		50		1 90
Stelling, R., Flour	1	1	5		5		1 100
Wisconsin Chair Co., Chairs	2	5	585	50	635	38	4 550
Totals	9	7	821	51	872	39	12 1060
PORT WING, BAYFIELD CO.—							
Asphund & Carlson, Shingles	1		10		10	3	1 50
Miller Bros., Stone	1		20		20		2 70
Moore & Kepler, Saw Mill	1		80		80	4	3 270
Totals	3		110		110	7	6 390
POYSIPPI, WAUSHARA CO.—							
Poyssippi Roller Mills, Flour, etc.	3		4		4		†
Poyssippi Saw Mill, Sawing	3		5		5		†
Totals	6		9		9		
PRAIRIE DU CHIEN, CRAWFORD CO.—							
Artesian Roller Mill, Flour and Feed	1		2		2		1 40
Benthen, Chas., Machinery	1		2		2		†
Cherrier Bros., Buttons	1		3		3		†
Eureka Button Factory, Buttons	1		32		32		†
Fox & Havre, Buttons	1		8		8		†
Horsfall, D. F., Saw Mill	1		10		10		1 40
Hunting Elevator Co., Elevator	1	1	10		10		2 120
Kasperek, Joseph, Buttons	1		10		10		†
Klefer & Co., Buttons	1		4		4		**
Knops Bros., Buttons	1		4		4		†
Lechnir, V., Buttons	1		5		5	1	†
Prairie City Elec. Co., Light	1		2		2		2 125
Prairie du Chien Button Factory, Buttons	1	1	60		60	3	1 50
Prairie du Chien Mfg. Co., Cooperage	1		16		16	6	1 35
Prairie du Chien Steam Laundry	1		2		2		1 3
Prairie du Chien Woolen Mill, Woolens	1	1	20	40	60		1 75
H. Klenow, Boxes	1		7		7		1 30
Schumann & Menges Brg. Co., Brewery	1	1	6	1	7		2 70
Totals	15	4	203	41	244	10	13 588

*=Electric; †=Water; ‡=Gas; §=Hand; **=Leased. Digitized by Google

ESTABLISHMENTS INSPECTED.

Location, Name and Business.	Buildings.		Employees.				Boilers.	
	Under 3 stories.	3 stories and over.	Male.	Female.	Total.	Under 16 yrs. of age.	Number.	Power.
PRATT JUNCTION, ONEIDA CO.—								
Sukey, James, Saw Mill	1		10		10		1	45
PRENTICE, PRICE CO.—								
Calumet, The, Printing	1		3		3			§
King, B. W., Foundry and Mach.	1		4		4		1	12
Northwestern Cooperage & Lbr Co., Staves....	1		20		20	7	2	90
Palmer & Kester, Creamery	1		2		2		1	10
U. S. Leather Co., Tannery	3	1	80		80			
Van Dusen, G. O., & Co., Lumber	2						3	170
Totals	9	1	109		109	7	11	672
PRINCETON, GREEN LAKE CO.—								
Lelmer & Co., Tubs	2		6		6			†
Princeton Brewery, Brewing	4		8		8		1	40
Princeton Roller Mill, Flour and Feed	3		5		5			†
Schwanke, A., Wagons, etc.	3		15		15		1	25
Totals	11		34		34		2	65
READSTOWN, VERNON, CO.—								
Crago, John, Flour	1		2		2			†
Earle, F. B., Tob. Warehouse	1		10	38	48	3		§
Lewis, R. W., Staves, Etc.	1		9		9	2	1	30
Totals	3		21	38	59	5	1	30
RED CLIFF, BAYFIELD CO.—								
Red Cliff Lumber Co., Saw Mill	1		110		110	2	3	350
REEDSBURG, SAUK CO.—								
Howland & Johnston Co., Lumber	1		6		6		2	75
Reedsburg Brewery, Brewing	6		7		7		1	35
Reedsburg Canning Co., Cannery	2		60	40	100		2	30
Reedsburg Clothing Co., Clothing	1		7	15	22	2		**
Reedsburg Creamery	1		6		6		1	20
Reedsburg Elec. Lt. & Water Co., Lt., etc.	1		4		4		2	160
Reedsburg Grist Mill, Grist	2	1	3		3		1	50
Reedsburg Steam Laundry	1		3	3	6		1	20
Reedsburg Woolen Mill Co., Woolens	4	1	70	48	118	2	2	160
Sanders, A. M., Machines, etc.	1		4		4			†
Schoepfweiser, Wm., Heading	1		8		8		2	100
West Side Building Co., Int. Work	3		8		8		1	25
Totals	24	2	186	106	292	4	15	675
RIB LAKE, TAYLOR CO.—								
U. S. Leather Co.	3		85		85	2	9	500
Rib Lake Lumber Co., Lumber	3		150		150		9	650
Hintz, Frank, Lumber	1		25		25		1	70
Totals	7		260		260	2	19	1220
RICE LAKE, BARRON CO.—								
Barron Co., Handle Factory, Saw Mill	1		19		19		1	70
City Brewery, Brewing	1		2		2		1	8
Johnson, O. J., Sash, etc.	1		6		6		1	20
Knapp, Stout & Co., Flour		2	5		5			†
Putrow, David, & Co., Bicycles	1		3		3			†
Rice Lake Chronotype, Printing	1		3		3			†
Rice Lake Lender, Printing	1		2	1	3			†
Rice Lake Lumber Co., Lumber	2	1	219		219		8	770
Rice Lake Mfg. Co., Sash, etc.	1		20		20		1	40
Rice Lake Times, Printing	1		3		3			§
Rice Lake Water Works, Water and Lt.	1		5		5		2	120
Sandahl, John, Carriages	1		3		3			†
Totals	12	3	290	1	291		14	1028

*—Electric; †—Water; ‡—Gas; §—Hand; **—Leased.

ESTABLISHMENTS INSPECTED.

Location, Name and Business.	Buildings.		Employees.				Boilers.	
	Under 3 stories.	3 stories and over.	Male.	Female.	Total.	Under 16 yrs. of age.	Number.	Power.
RIPON, FOND DU LAC CO.—								
Amend, J. E., Co., Creamery	1	.....	4	1	5	.....	1	20
Bonton & Germain Co., Gloves	1	.....	26	34	60	.....	†	†
Bonton Mfg. Co., Gloves	1	.....	4	5	9	.....	†	†
Haas, John, Brewery	3	1	6	.....	6	.....	1	50
Heath & Butzke, Carriages	1	.....	25	.....	25	.....	§	§
Heinz Pickle Factory, Pickles	1	.....	3	.....	3	.....	§	§
Ripon Knitting Works, Hosiery	1	1	35	77	112	14	1	60
Ripon Packing Co., Canning	1	.....	8	.....	8	.....	§	§
Ripon Roller Mills, Flour .....	.....	1	6	1	7	.....	1	120
Ripon Steam Laundry	1	.....	2	5	7	1	1	10
Ripon Veneer & Box Works, Veneer	1	.....	12	.....	12	.....	1	50
Schaffer, W. E., Mfg. Co., Foundry	1	.....	8	.....	8	.....	†	†
Totals	13	3	139	123	262	15	6	310
RIVER FALLS, PIERCE CO.—								
C. St. P. M. & O. Ry. Co., Water Tanks	1	.....	1	.....	1	.....	1	12
City Water Works, Water	1	.....	1	.....	1	.....	1	25
Fortune, George, & Co., Flour	1	.....	2	.....	2	.....	†	†
Grimm, John, Wagons	1	.....	3	.....	3	.....	†	†
Hemenway, J. S., Agricultural Implements	1	.....	3	.....	3	.....	†	†
Lund, A. W., & Co., Wagons	2	.....	15	.....	15	.....	1	30
Putnam, W. H., Flour	1	.....	3	.....	3	.....	†	†
River Falls Elec. Lt. Plant, Light, etc.	1	.....	2	.....	2	.....	†	†
River Falls Journal, Printing	1	.....	2	1	3	.....	†	†
River Falls Lt., Heat & Power Co., Gas.	1	.....	2	.....	2	.....	1	10
Smith, George D., Wagons	1	.....	3	.....	3	.....	1	12
Smith Printing Co., Printing	1	.....	3	.....	3	.....	†	†
Tubbs Medicine Co., Laboratory	1	.....	2	1	3	.....	§	§
Van Voorhis & Co., Flour	1	2	5	.....	5	.....	†	†
Wis. Elevator Co., Grain	2	.....	4	.....	4	.....	†	†
Totals	16	2	50	2	52	.....	6	119
ROBERTS, ST. CROIX CO.—								
Roberts Creamery Co	1	.....	2	.....	2	.....	1	12
Wis. Elevator Co., Grain	2	.....	4	.....	4	.....	†	†
Totals	3	.....	6	.....	6	.....	1	12
RUSK, DUNN CO.—								
Christianson, N. K., Feed	1	.....	3	.....	3	.....	1	25
Rusk Co-operative Creamery Co.	1	.....	2	.....	2	.....	1	20
Wis. Elevator Co., Grain	1	.....	2	.....	2	.....	†	†
Totals	3	.....	7	.....	7	.....	2	45
ST. CROIX FALLS, POLK CO.—								
Interstate Park Roller Mill, Flour .....	.....	1	4	.....	4	.....	†	†
Standard, The, Printing	1	.....	1	1	2	.....	§	§
Wall, S. J., Woodwork	1	.....	6	.....	6	.....	1	20
Weinhardt, Isaac, Planing	1	.....	3	.....	3	.....	†	†
Totals	3	1	14	1	15	.....	1	20
SAWYER P. O., DOOR CO.—								
Door Co. Canning Co., Canning	1	.....	60	35	95	5	2	160
Lawrence, A. W., Planing	1	.....	12	.....	12	.....	1	60
Shaw, A., & Co., Flour .....	.....	1	4	.....	4	.....	1	40
Totals	2	1	76	35	111	5	4	280
SAXON IRON CO.—								
De Fer, J. J., Saw Mill	1	.....	10	.....	10	.....	2	200
SAXVILLE, WATSHARA CO.—								
Saxville Feed Mill, Feed	1	.....	2	.....	2	.....	†	†

ESTABLISHMENTS INSPECTED.

Location, Name and Business.	Build-ings.		Em-ployes.				Boil-ers.	
	Under 3 stories.	3 stories and over.	Male.	Female.	Total.	Under 16 yrs. of age.	Number.	Power.
SCHLEISINGERVILLE, WASHINGTON CO.—								
Botschaffer, Der, Printing	1	2	2	2	4	1	1	4
Klitt, F., Wagons	1	3	3	3	6	1	1	13
Kleit, J., Saw Mill	1	3	3	3	6	1	1	40
Rushey, John, Foundry	1	3	3	3	6	1	1	6
Schleisingerville Creamery	1	2	2	2	4	1	1	10
Shill, J., & Son, Wagons	1	3	3	3	6	1	1	12
Stork, C., Brewery	2	9	9	9	18	2	2	120
Wis. Pipe Organ Factory, Organs	2	11	11	11	22	1	1	†
Totals	9	36	36	36	72	7	7	198
SHAWANO, SHAWANO CO.—								
Advocate, Dispatch & Wochenblatt, Ptg.	1	3	1	4	5	1	1	10
Municipal Lt. & Water Plant	1	3	3	3	6	2	2	100
Nachtway, E. J., Machinery	1	2	2	2	4	1	1	†
Roddant, E. F., Brewing Co., Brewery	1	8	8	8	16	1	1	100
Shawano City Mills, Flour	1	3	3	3	6	1	1	†
Shawano Journal, Printing	1	1	2	3	4	1	1	†
Shawano Steam Laundry	1	1	2	3	4	1	1	10
Volkshote Publishing Co., Printing	1	2	1	3	4	1	1	†
Wolf River & Fibre Co., Pulp	1	1	95	95	190	1	1	†
Totals	7	3	118	6	124	3	5	220
SHELL LAKE, WASHBURN CO.—								
Cairns, Thomas, Bicycles	1	1	1	1	2	1	1	4
Dionne, J., Machinery	1	2	2	2	4	1	1	6
Salass, Louis, Wagons	1	2	2	2	4	1	1	†
Shell Lake Co-op. Creamery Assn.	1	1	1	1	2	1	1	8
Shell Lake Lumber Co.	7	60	1	61	62	10	10	1330
Shell Lake Watchman, Printing	1	2	2	2	4	1	1	8
Washburn Co. Register, Printing	1	5	5	5	10	1	1	10
Totals	13	73	1	74	75	14	14	1412
SOLDIERS GROVE, CRAWFORD CO.—								
Bekkedahl, M. H., Tobacco Warehouse	1	20	40	60	4	1	1	†
Keough Excelsior Mfg. Co., Excelsior	1	10	10	10	1	1	1	50
Peterson, Atley, Saw Mill	1	8	8	8	1	1	1	†
Soldiers Grove Milling Co., Grist	1	3	3	3	1	1	1	†
Totals	4	41	40	81	4	1	1	50
SOMERSET, ST. CROIX CO.—								
Apple River Power Co., Light, etc.	1	3	3	3	1	1	1	†
Mason, Edward, Feed	1	2	2	2	1	1	1	†
Totals	2	5	5	5	2	2	2	†
OLON SPRINGS, DOUGLAS CO.—								
Gander, Frank, Shingles	1	11	11	11	2	1	1	20
SPARTA, MONROE CO.—								
American Cigar Co., Tob. Warehouse	4	250	300	550	14	1	1	75
City Steam Laundry	1	2	4	6	1	1	1	10
Evans, J. W., Sash, etc.	1	4	4	4	1	1	1	†
Herald Advertiser, Printing	1	3	3	6	1	1	1	†
McCoy, B. E., Feed	1	2	2	2	1	1	1	†
Monroe Co. Democrat, Printing	1	3	2	5	1	1	1	†
Sparta Iron Works, Machinery	2	17	1	18	1	1	1	20
Sparta Sash & Door Co., Sash, etc.	1	3	3	3	1	1	1	†
Totals	12	284	310	594	14	3	3	105
SPIDER LAKE, RAYFIELD CO.—								
Spider Lake Saw Mill & Lbr. Co., Saw Mill....	1	75	75	75	3	3	3	140

*—Electric; †—Water; ‡—Gas; §—Hand; **—Leased.

ESTABLISHMENTS INSPECTED.

Location, Name and Business.	Buildings.		Employees.				Boilers.	
	Under 3 stories	3 stories and over.	Male.	Female.	Total.	Under 16 yrs. of age.	Number.	Power.
SPRING VALLEY, PIERCE CO.—								
Brown Bros. Lumber Co., Saw Mill	1		10		10	1	1	35
Kahut, J. P., Wagons	1		4		4			‡
Lowater, Frank, Brick	1		25		25	1	1	14
Moffatt, Mark, Feed	1		1		1			‡
New Richmond Roller Mill Co., Grain		1	3		3			‡
Spring Valley Creamery Co.	1		5		5		1	25
Spring Valley Iron & Ore Co., Iron Mine	4	1	150		150		7	625
Spring Valley Sp., St. & Hdg. Co., Sp., Etc.	2		65		65	1	3	220
Spring Valley Seen, Printing	1		2	2	4			‡
Tanberg-Siebers Co., Grain	1		6		6			‡
Totals	13	2	271	2	273	3	13	919
STANLEY, CHIPPEWA CO.—								
Goshaw & Geogh, Furniture	1		10		10	2	1	65
N. W. Lumber Co., Saw Mill	6		316	4	320	6	15	1500
Stanley Creamery Co.	1		2		2		1	25
Stanley Republican, Printing	1		3	1	4	1		‡
Stanley Roller Mills, Flour	1		2		2		1	30
Stanley Water Works	1		2		2			‡
U. S. Leather Co., Tannery	7		80		80		5	240
Totals	18		415	5	420	9	23	1860
STAR LAKE, VILAS CO.—								
Salsich & Wilson, Lumber	4		225		225	1	7	600
STAR PRAIRIE, ST. CROIX CO.—								
Bixby, H. L., Flour, etc.	1	1	6		6			‡
Cedar Lake Milling Co., Flour	1		3		3			‡
Superior Creamery Co.	1		2		2		1	15
Totals	3	1	11		11		1	15
STEUBEN, CRAWFORD CO.—								
Beaumont, D., Saw Mill	1		5		5		1	40
Hulbert, J. J., Saw Mill	1		4		4		1	40
Totals	2		9		9		2	80
STOUGHTON, DANE CO.—								
Amundson, Peter, Machine Shop	1		3		3			‡
City Water Works, Water	1		2		2		2	160
Gunderson, Osmund, Tob. Warehouse	1	1	4	32	36	4		‡
Johnson, M. B., Wagons	1		2		2			‡
Kittleson, L. & Son, Tob. Warehouse	1				4			‡
Lee, O. C., Tob. Warehouse	1		4		4			‡
Lee, Simon, Marble		1	2		2			‡
Mandt, T. G., Vehicle Co., Wagons, etc.	6	1	180	2	182	2	2	300
Midgard, Andrew J., Printing	1		2		2			‡
Olson, K. & Co., Harness	1		3		3			‡
Olson, N. F., Wagons	1		6		6			‡
Peterson, S. A., Wagons	1		5		5			‡
Quam, W., Harness	1		2		2			‡
Roe, O. K., Tob. Warehouse	1							‡
Roth, Bruner & Felst, Tob. Warehouse	1		6		6			‡
Stoughton Courier, Printing	1		3	1	4			‡
Stoughton Hub, The, Printing	1		3	2	5			‡
Stoughton Mill, Flour and Grala		2	5		5			‡
Stoughton Wagon Co., Wagons, etc.	10		146	1	147	1	2	230
Townsend & Hyland, Ice Houses	2		20		20			‡
Vinjem, L. N., Boxes	1		6		6			‡
Totals	34	5	404	38	442	7	6	690

*—Electric; †—Water; ‡—Gas; §—Hand; •—Leased.

ESTABLISHMENTS INSPECTED.

Location, Name and Business.	Buildings.		Employees.				Boilers.	
	Under 3 stories.	3 stories and over.	Male.	Female.	Total.	Under 16 yrs. of age.	Number.	Power.
STURGEON BAY, DOOR CO.—								
Pankratz, Geo., Lumber Co., The.....	1	80	80		80		5	250
Reynolds Preserving Co., Canning	1	210	50		260	29	4	250
Sturgeon Bay Elec. Lt. Co., Light, etc.....	1	2			2		3	125
Washburn, N. S., Lumber Co., Planing	1	48			48		1	190
Totals	4	340	50		390	29	13	725
THORPE, CLARK CO.—								
Ashland Iron & Steel Co., Charcoal Ovens.....	12	10			10			\$
Boardman, E. A., Mfg. Co., Planing, etc.....	1	5			5		1	20
Cirkel Mfg Co., Staves, etc.....	2	30			30		2	125
City Water & Elec. Lt. Co., Light, etc.....	1	1			1		1	85
Colby Bros., Saw Mill, etc.....	1	9			9	2	1	50
Nye, Lusk & Hudson, Saw Mill	1	30			30		2	150
Thorpe Courier, Printing	1	2			2			\$
Thorpe Creamery	1	6			6		1	12
Totals	20	93			93	2	8	442
TOMAH, MONROE CO.—								
C., M. & St. P. R. R. Co., Bridge.....	1	70			70		2	120
Goodyear, C. A., Planing	1	300	1		301		8	640
Tomah Elec. Lt. Co., Light, etc.....	1	4			4		2	160
Tomah Herald, Printing	1	3			3			\$
Tomah Journal, Printing	1	3	1		4			\$
Tomah Steam Laundry	1	2	2		4		1	10
Totals	6	382	4		386		13	930
TOMAHAWK, LINCOLN CO.—								
Bangor Lumber Co., Saw Mill, etc.....	2	120			120		6	600
Bay Mill Co., Saw Mill	1	108			108		4	600
Bradley, W. H., Laundry	1	2	2		4			**
Bradley, W. H., Steam Plant	1	2			2		2	100
City Elec. Lt. Plant, Light and Power.....	1	2			2			†
City Water Works, Water	1	2			2		2	90
Crane, H. B., Saw Mill	1						4	180
Leader, The, Printing	1	1	2		3			\$
Marquette, Tom. & W. N. R. Co., Cars.....	2	8			8			**
Tomahawk Iron Works, Foundry	3	15			15			**
Tomahawk Pub. Co., Printing	1	4	2		6			†
Totals	15	264	6		270		18	1570
TONEY, GATES CO.—								
Enterprise, The, Printing	1	2			2			\$
Hein, J., Co., The, Saw Mill	3	100			100	9	5	360
Totals	4	102			102	9	5	360
TRAMWAY, DUNN CO.—								
Kirkland, E. J., Brick	2	50			50	3	2	125
TRIPOLI, LINCOLN CO.—								
Stolle, H. H.	2	25			25		4	225
UPSON, IRON CO.—								
Newport Mining Co., Iron Mine	1	48			48		3	240
Vogel, Albert, Saw Mill	2	30			30		1	40
Totals	3	78			78		4	280
VIROQUA, VERNON CO.—								
Bekkedahl, A. M., Tob. Warehouse	1	8	30		38			\$
Eckhardt, Fred, Grain	1	2			2			\$
Eckhardt, Fred, Tob. Warehouse	1	35	45		80			\$
Elgin Creamery Co., Creamery	1	2			2		1	14
Emilsson & Nelson, Flour	1	2			2		1	75
Espeseth, Christ, Tobacco Warehouse	1	10	20		30			\$
Helgeson, Ole, Tobacco Warehouse	1	12	28		40			\$

*—Electric; †—Water; ‡—Gas; §—Hand; **—Leased.

ESTABLISHMENTS INSPECTED.

Location, Name and Business.	Buildings.		Employees.			Boilers.	
	Under 3 stories.	3 stories and over.	Male.	Female.	Total.	Under 16 yrs. of age.	Number. Power.
Larson Bros., Monuments	1	...	3	...	3	...	\$
Solberg, Isaac, Wagons	1	...	3	...	3	...	†
Thompson Bros., Feed	1	...	2	...	2	...	1 10
Vernon Co. Lumber & Mfg. Co., Planing Mill	1	...	5	...	5	...	†
Viroqua Electric Light Co., Light and Power	1	...	5	...	5	...	2 200
Totals	12	...	89	123	212	...	5 299
WASHBURN, BAYFIELD CO.—							
Akeley & Sprague, Lumber	2	...	140	...	140	...	10 400
Biglow, A. A., & Co., Lumber	2	...	250	...	250	...	17 1400
Jacobs, John A., Lumber	2	...	77	...	77	1	2 130
Renfield & Lameroux, Reels and Crates	1	...	55	...	55	...	1 50
N. W. Fuel Co., Coal Dock	1	...	50	...	50	...	2 100
Nye Jenks Co., Grain	1	1	20	1	21	...	2 700
Steinert, R., & Co., Machine Shop	1	...	3	...	3	...	1 12
Thompson Lumber Co., The, Lumber	1	...	90	...	90	...	8 300
Washburn Brewing Co., Brewery	1	...	4	...	4	...	1 40
Washburn Elec. Light & Power Co., Light	1	...	4	...	4	...	2 140
Washburn News, Printing	1	...	3	1	4	...	†
Washburn Steam Laundry, Laundry	1	...	3	4	7	...	1 30
Washburn Times, Printing	1	...	4	...	4	...	†
Washburn Water Works Co., Water	1	...	2	...	2	...	2 150
Totals	17	1	705	6	711	1	49 3452
WAUPUN—							
Althouse-Wheeler Co., Windmills	4	...	60	...	60	1	1 85
Breyer Bros., Woodwork	1	...	4	...	4	...	1 30
City Water & Light Co., Light and Power	1	...	4	...	4	...	3 166
Henry, I. L., & Co., Boxes	1	...	3	10	13	...	**
Kohl, L. P., Grain	1	...	2	...	2	...	\$
Kotenberg & Vesper, Creamery	1	...	2	...	2	...	1 20
Kraus, F., & Co., Grain	1	...	2	...	2	...	†
Movles, J. S., Carriage Co., Carriages	1	1	28	...	28	...	†
Olson & Nelson, Flows	2	...	4	...	4	...	1 8
Schaler-Hartgerink Co., The, Umbrellas	1	...	30	30	60	1	†
Skals, August, Brewery	1	...	4	...	4	...	1 20
Waupun Steam Laundry, Laundry	1	...	2	1	3	...	1 12
Wells, M. D., Shoe Co., Shoes	1	...	2	46	48	...	1 15
Zimmerman Carriage Co., Carriages	1	...	20	...	20	...	\$
Totals	18	1	167	87	254	2	10 356
WAUTOMA, WAUSHARA CO.—							
Waushara Argus, Printing	1	...	3	1	4	...	†
Wautoma Roller & Feed Mill, Flour	3	...	6	...	6	...	†
Totals	4	...	9	1	10	...	...
WAUWATOSA, MILWAUKEE CO.—							
Burnham Bros., Brick	4	...	85	...	85	...	3 300
Castalla Bottling Works, Soft Drinks	1	1	6	...	6	...	1 30
Krantz, Chas., Brick Co., Brick	4	...	58	...	58	...	2 120
Lenz, A., Sash, etc.	1	...	15	...	15	2	1 40
Manegold, A. F., & L., Stone	2	...	20	...	20	...	1 90
Manville, H. W., Johns Co., Magnesite	1	1	40	...	40	...	4 470
Miller, Fred, Brewing Co., Brewery	7	4	257	39	296	13	7 540
Milwaukee Pickle Co., Pickles	3	...	5	3	8	...	1 35
Monarch Stone Co., Stone	3	...	35	...	35	...	2 60
Wauwatosa Laundry, Laundry	1	...	2	2	4	...	1 35
Wauwatosa Milling, Fuel & Lumber Co., Feed	4	1	4	...	4	...	1 60
Wauwatosa News, Printing	1	...	5	...	5	...	\$
Totals	32	7	532	44	576	15	24 1780

* = Electric; † = Water; ‡ = Gas; § = Hand; ** = Leased.

ESTABLISHMENTS INSPECTED.

Location, Name and Business.	Build-ings.		Em-ploy-ees.				Boil-ers.	
	Under 3 stories.	3 stories and over.	Male.	Female.	Total.	Under 16 yrs. of age.	Number.	Power.
WEST ALLIS, MILWAUKEE CO.—								
Milwaukee Electric Co., Dynamos	3	120	20	140	3	400		
Prescott Steam Pump Co., Pumps	1	50	1	51	2	200		
Totals	10	170	21	191	5	600		
WESTBY, VERNON CO.—								
Bekkedohl, M. H., Tobacco Warehouse	2	47	20	77		‡		
Elgin Creamery Co., Creamery	1	1	1	1	1	10		
Haakenson, Andrew, Box Factory	1	8	8	8	1	10		
Hanson, L., & Co., Tobacco Warehouse	1	18	19	37		‡		
Johnson, Andrew, Tobacco Warehouse	1	25	35	60		‡		
Shannon, Charles, Tobacco Warehouse	1	15	20	35		‡		
Thoreson, Theodor, Planing Mill	1	10	10	10	1	45		
Times, The, Printing	1	2	2	2		‡		
Westby Water Works, Water	1	1	1	1		‡		
Totals	10	127	104	231	3	65		
WESTFIELD, MARQUETTE CO.—								
Laurance Flour & Feed Mill, Flour and Feed	3	3	3	3		†		
Westfield Roller Mill, Flour and Feed	5	4	4	4		†		
Totals	8	7	7	7				
WEST SALEM, LA CROSSE CO.—								
Neshonoc Electric Light Co., Light and Power	1	1	1	1		†		
Nonpareil Journal, Printing	1	2	2	4		‡		
Totals	2	3	2	5				
WHITEWATER, WALWORTH CO.—								
Empire Mills, Flour	1	2	2	2		†		
Klinger, N., Brewery	1	1	4	4	1	30		
Nonpareil Creamery Co., Creamery	1	8	8	8	1	20		
Weyher & Son, Wagons, etc.	2	30	1	31	1	50		
Whitewater Electric Light Co., Light	1	4	4	4	2	225		
Whitewater Gazette, Printing	1	3	1	4		‡		
Whitewater Register, Printing	1	3	2	5		†		
Whitewater Robt Tanning Co., Tannery	1	2	2	4	1	4		
Whitewater Steam Laundry, Laundry	1	2	2	4	1	15		
Wis. Dairy Supply Co., Dairy Supplies	1	9	1	10		‡		
Znill & Hawes, Grist Mill	2	3	3	3		‡		
Totals	12	1	70	9	7	344		
WILD ROSE, WAUSHARA CO.—								
Wild Rose Grist & Feed Mill, Feed	2	4	4	4		†		
Wild Rose Planing Mill & Mach. Shop	3	7	7	7		†		
Totals	5	11	11	11				
WILSON, ST. CROIX CO.—								
Bush, F. H., Creamery	1	2	2	2	1	15		
Keenlyne, Albert, Feed	1	2	2	2	1	25		
Totals	2	4	4	4	2	40		
WITHEE, CLARK CO.—								
Paulson, Paul A., Saw Mill	1	12	12	12	1	50		
Sentinel, The, Printing	1	2	2	2		‡		
Withee Creamery Co., Creamery	1	2	2	2	1	20		
Totals	3	16	16	16	2	70		
WOODVILLE, ST. CROIX CO.—								
Woodville Creamery Co., Creamery	1	2	2	2	1	15		
WOODBORO, ONEIDA CO.—								
Wood, George, Lumber Co., Lumber	4	1	146	4	150	2	7	590

FACTORY INSPECTION.

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SUMMARIES BY CITIES OR LOCATION

Of the number of the establishments inspected and buildings occupied by them, the number of employes classified as to sex and age, and the number of boilers used and of their horse power, also other power.

Number.	Place.	No. of establish-ments.	Build-ings.		Employees.				Boilers.		Other power.
			Under 3 stories.	3 stories and over.	Male.	Female.	Total.	Under 16 yrs. of age.	Number.	Power.	
1	Abbotsford, Clark Co.	2	2		32		32	3	3	165	
2	Albertville, Chippewa Co. ...	1	1		1		1	1	1	12	
3	Alma, Buffalo Co.	2	3		6		6	1	2	45	
4	Almena, Barron Co.	2	2		2		2	2	2	75	
5	Almond, Portage Co.	2	5		10		10		1	25	1
6	Amery, Polk Co.	8	6	2	64		64	6	3	125	5
7	Antigo, Langlade Co.	16	19	2	258	4	262	33	20	1,353	3
8	Appleton, Outagamie Co.	49	60	16	1,340	430	1,770	102	76	9,096	24
9	Arbor Vitae, Vilas Co.	1	4		200		200	5	2	300	
10	Arpin, Gates Co.	1	3		150		150	9	3	105	
11	Ashland, Ashland Co.	37	58	3	2,095	28	2,123	23	93	8,547	9
12	Aurora, Waukesha Co.	2	4		6		6		1	30	1
13	Baldwin, St. Croix Co.	10	6	4	33		33		5	114	4
14	Bangor, La Crosse Co.	2	3		10	1	11	1	2	140	1
15	Baraboo, Sauk Co.	20	18	3	327	98	425	7	16	1,056	6
16	Baronette, Barron Co.	4	4		33		33	2	4	95	
17	Barron, Barron Co.	10	9	1	88	34	122	1	8	271	4
18	Bayfield, Bayfield Co.	5	9		272		272	3	12	1,122	1
19	Beaver Dam, Dodge Co.	18	20	2	655	159	814	50	18	1,405	6
20	Beldenville, Pierce Co.	4	5		64		64	3	4	155	1
21	Beloit, Rock Co.	40	57	7	1,850	239	2,089	33	39	2,432	28
22	Berlin, Green Lake Co.	32	49	5	482	263	745	12	20	1,007	16
23	Bibon, Bayfield Co.	1	2		60		60	3	4	200	
24	Black Riv. Falls, Jackson Co.	15	14	1	81	1	82	1	2	62	12
25	Bloomer, Chippewa Co.	9	9	2	70	2	72		6	155	4
26	Boyceville, Dunn Co.	2	2		5		5		1	12	1
27	Brillion, Calumet Co.	7	5	3	126		126	4	4	270	3
28	Brodhead, Green Co.	1		1	3	1	4	1			1
29	Brokaw, Marathon Co.	1	3		167	10	177	3	4	700	
30	Bruce, Chippewa Co.	2	4		117	5	122	4	6	750	
31	Brushville, Waushara Co. ...	1	3		3		3		1	25	
32	Burlington, Racine Co.	11	11	1	105	110	215	1	10	586	4
33	Burnett Junct., Dodge Co. ...	2	3		5		5		1	20	1
34	Butternut, Ashland Co.	4	6		54		54	9	4	255	
35	Cameron, Barron Co.	3	3		12		12		2	80	1
36	Canton, Barron Co.	2	2		2		2		2	66	
37	Carrollville, Milwaukee Co. ...	1	3	2	108	28	136	1	4	1,550	
38	Cashton, Monroe Co.	8	8		38	3	41		5	134	3
39	Catawba, Price Co.	1	1		12		12		1	60	
40	Ceylon, St. Croix Co.	2	2		5		5				2
41	Chelsea, Taylor Co.	1	1		40		40		4	400	
42	Chetek, Barron Co.	3	4	1	19	1	20		3	82	2
43	Chelton, Calumet Co.	9	5	4	49		49		6	327	3
44	Chippewa Falls, Chipp. Co. ...	16	32	9	596	31	627	3	17	1,280	6
45	Clear Lake, Polk Co.	6	7		30		30		3	65	4
46	Clintonville, Waupaca Co. ...	6	4	2	43	5	48		5	165	2
47	Colfax, Dunn Co.	7	7		41	7	48		2	65	5
48	Coloma Sta., Waushara Co. ...	1	2		6		6				1
49	Comb. Locks, Outagamie Co. ...	1	4		224	6	230		10	1,000	
50	Commonwealth, Florence Co. ...	1	1		95		95				1

SUEMARIES BY CITIES — Continued.

Number.	Place.	No. of establishments.	Buildings.		Employees.				Boilers.		Other power.
			Under 3 stories.	3 stories and over.	Male.	Female.	Total.	Under 16 yrs. of age.	Number.	Power.	
51	Crandon, Forest Co.	3	5	...	92	...	92	5	5	350	...
52	Cudahy, Milwaukee Co.	2	13	3	516	4	520	17	18	1,420	...
53	Cumberland, Barron Co.	9	10	...	83	2	85	5	9	773	5
54	Curtis, Clark Co.	2	2	...	22	...	22	1	2	108	...
55	Darlington, Lafayette Co.	4	4	...	20	...	20	...	1	250	3
56	Dartford, Green Lake Co.	2	3	...	11	...	11	...	1	4	1
57	Delavan, Walworth Co.	7	6	1	23	4	27	...	5	335	3
58	De Pere, Brown Co.	10	9	2	207	159	366	21	6	768	7
59	Dodgeville, Iowa Co.	5	6	...	28	...	28	...	5	230	1
60	Downing, Dunn Co.	2	2	...	8	...	8	...	1	15	1
61	Downsville, Dunn Co.	2	2	...	9	...	9	...	2	65	...
62	Dresser Junction, Polk Co.	1	1	...	3	...	3	...	1	16	...
63	Drummond, Bayfield Co.	2	5	...	129	...	129	...	11	1,355	...
64	Dundas, Calumet Co.	2	2	...	27	...	27	...	2	61	...
65	Dunnville, Dunn Co.	3	3	...	41	...	41	...	3	85	...
66	Durand, Pepin Co.	12	14	2	47	5	52	...	8	195	5
67	Dwight, Polk Co.	1	1	...	1	...	1	...	1	8	...
68	Eau Claire, Eau Claire Co.	42	82	6	1,994	197	2,191	49	65	5,485	19
69	Eau Galle, Dunn Co.	3	2	1	6	...	6	...	1	20	2
70	Edgerton, Rock Co.	12	13	...	94	202	296	4	1	8	11
71	Eldswold, Clark Co.	1	2	...	35	...	35	...	3	150	...
72	Elcho, Langlade Co.	1	2	...	60	...	60	...	3	200	...
73	Elkhorn, Walworth Co.	6	6	...	12	8	20	...	5	205	2
74	Elk Mound, Dunn Co.	2	1	1	4	...	4	...	1	12	1
75	Ellsworth, Pierce Co.	17	16	1	53	2	55	...	8	440	11
76	Fond du Lac, F'd du Lac Co.	47	50	17	1,358	316	1,674	68	42	2,580	22
77	Fort Atkinson, Jefferson Co.	11	16	5	452	76	528	53	15	947	1
78	Germania, Marquette Co.	1	1	...	3	...	3	...	1	30	...
79	Gile, Iron Co.	2	3	...	231	...	231	12	10	1,050	...
80	Glen Flora, Gates Co.	3	3	...	56	...	56	...	3	175	...
81	Glenwood, St. Croix Co.	6	9	...	71	2	73	3	7	325	2
82	Glidden, Ashland Co.	3	6	...	81	...	81	15	6	330	...
83	Grand Rapids, Wood Co.	15	14	3	409	17	426	13	20	1,310	5
84	Grantsburg, Burnette Co.	10	11	...	64	...	64	...	8	400	3
85	Green Bay, Brown Co.	39	54	12	1,609	335	1,944	186	49	3,732	10
86	Hammond, St. Croix Co.	8	8	...	27	1	28	...	3	150	5
87	Hartford, Washington Co.	13	12	4	106	19	125	...	10	457	4
88	Hawkins, Gates Co.	1	1	...	40	...	40	...	3	80	...
89	Hawthorn, Douglas Co.	3	3	...	25	...	25	...	5	270	...
90	Hayward, Sawyer Co.	8	10	1	482	1	483	18	24	2,310	4
91	Hazelhurst, Oneida Co.	1	5	...	225	...	225	4	5	480	...
92	Horicon, Dodge Co.	6	9	...	281	3	284	...	5	185	2
93	Hortonville, Outagamie Co.	4	3	1	26	2	28	...	3	155	1
94	Houghton, Bayfield Co.	1	2	...	20	...	20	...	1	35	...
95	Hudson, St. Croix Co.	19	24	4	468	30	498	6	17	1,193	12
96	Hurley, Iron Co.	6	10	...	90	1	91	2	12	1,350	2
97	Ingram, Gates Co.	2	2	...	9	...	9	...	3	120	...
98	Iron Belt, Iron Co.	2	4	...	435	...	435	6	8	890	...
99	Iron River, Bayfield Co.	2	4	...	371	...	371	...	8	680	...
100	Irrington, Dunn Co.	2	4	...	130	...	130	30	4	152	...
101	Janesville, Rock Co.	63	75	31	1,190	461	1,651	50	47	3,136	35
102	Jefferson, Jefferson Co.	20	18	7	266	35	301	3	21	1,111	4
103	Jewett, St. Croix Co.	1	1	...	2	...	2	...	...	...	1
104	Juneau, Dodge Co.	7	8	1	52	1	53	1	6	198	1
105	Kaukauna, Outagamie Co.	15	23	2	619	99	718	9	22	2,453	6

SUMMARIES BY CITIES — Continued.

Number.	Place.	No. of establishments.	Buildings.			Employees.				Boilers.		Other power.
			Under 3 stories.	3 stories and over.		Male.	Female.	Total.	Under 16 yrs. of age.	Number.	Power.	
106	Kenosha, Kenosha Co.	24	38	12		2,828	650	3,478	350	50	4,579	6
107	Kiel, Manitowoc Co.	3	3	2		144		144	3	5	295	
108	Kilbourn, Columbia Co.	5	5			14	4	18		3	133	2
109	Kimball, Iron Co.	1	2			45		45	2	2	150	
110	Kimberly, Outagamie Co.	1	3	2		199	1	200		5	725	
111	Kingston, Green Lake Co.	2	2			6		6		1	20	1
112	Knapp, Dunn Co.	2	2			5		5		1	15	1
113	Knox Mills, Price Co.	1	2			15		15	2	1	15	
114	La Crosse, La Crosse Co.	92	88	44		2,787	696	3,483	130	107	7,491	35
115	Lac du Flambeau, Vilas Co.	1	3			350		350	2	7	670	
116	Ladysmith, Gates Co.	5	6			129	2	141	12	3	300	3
117	Lake Geneva, Walworth Co.	6	6			16	3	19		6	456	2
118	Lake Nebagamon, Doug. Co.	1	5			230		230	5	5	600	
119	Lancaster, Grant Co.	7	6	1		30		30		3	280	3
120	Le Clair, Douglas Co.	1	2			30		30		3	230	
121	Little Chute, Outagamie Co.	2	3			77		77				
122	Little Falls, Polk Co.	1	1			2		2		1	25	
123	Madison, Dane Co.	44	38	15		1,396	166	1,562	29	32	2,789	21
124	Manchester, Green Lake Co.	2	2			8		8		1	15	1
125	Manitowoc, Manitowoc Co.	46	134	21		1,433	236	1,659	43	65	4,806	8
126	Marquette, Marquette Co.	36	49	1		2,086	61	2,147	35	92	8,233	13
127	Marlingo, Ashland Co.	1	1			30		30		1	60	
128	Markesan, Green Lake Co.	2	3			7		7		1	20	1
129	Marquette, Green Lake Co.	1	1			3		4		1	10	
130	Marshfield, Wood Co.	19	21	4		445	12	457	52	20	1,540	8
131	Mason, Bayfield Co.	1	3			176		176	3	11	1,100	
132	Mauston, Juneau Co.	8	7	1		21	2	23		5	256	3
133	Mayville, Dodge Co.	12	10	3		55	9	64	1	9	388	
134	Medford, Taylor Co.	13	19	1		233	5	238	8	11	642	5
135	Mellen, Ashland Co.	2	6			175		175	3	9	900	
136	Menasha, Winnebago Co.	13	13	18		1,412	136	1,548	112	30	5,520	4
137	Menomonie, Dunn Co.	17	23	1		754	7	761	11	26	1,677	5
138	Mercer, Iron Co.	1	1			35		35		2	80	
139	Merridan, Dunn Co.	1	1			2		2		1	20	
140	Merrill, Lincoln Co.	19	26	3		1,710	17	1,727	108	45	3,679	7
141	Milton, Rock Co.	2	2			2	2	4		1	15	1
142	Milwaukee, Milwaukee Co.	863	1258	577		48,362	8,973	57,335	2572	876	80,807	434
143	Milwaukee Town, Mil. Co.	2	11	2		180		180		6	750	
144	Mineral Point, Iowa Co.	7	16			264	6	270		11	819	
145	Minocqua, Vilas Co.	1	1			1		1		1	40	
146	Montello, Marquette Co.	2	10			133		133		2	110	
147	Montreal, Iron Co.	1	2			225		225	4	5	600	
148	Morse, Ashland Co.	1	2			61	1	62	3	3	180	
149	Nash, Bayfield Co.	1	2			25		25	1	1	50	
150	Neenah, Winnebago Co.	16	18	4		346	162	508	17	16	1,930	5
151	Nellsville, Clark Co.	2	7	1		76	1	77	7	3	195	
152	Nekoosa, Wood Co.	1	4	2		376	12	388		7	1,350	
153	Neshkora, Marquette Co.	4	9			20	8	28				4
154	New Holstein, Calumet Co.	5	3	2		98	20	118		3	265	3
155	New Lisbon, Juneau Co.	2	4			7		7		1	12	1
156	New London, Waupaca Co.	10	12	3		208	7	215	10	14	680	3
157	New Richmond, St. Cr's Co.	15	18	2		164	2	166		6	355	11
158	Nye, Polk Co.	1	1			2		2		1	12	
159	Oasis, Waushara Co.	1	2			2		2		1	25	
160	Oconto, Oconto Co.	12	18	3		773	28	801	17	30	2,760	3

SUMMARIES BY CITIES — Continued.

Number.	Place.	No. of establishments	Buildings.		Employees.				Boilers.		Other power.
			Under 3 stories	3 stories and over.	Male.	Female.	Total.	Under 16 yrs. of age.	Number.	Power.	
161	Odannah, Ashland Co.	2	9	...	587	7	594	16	7	960	...
162	Ogema, Price Co.	1	2	...	20	...	20	...	2	300	...
163	Onalaska, La Crosse Co.	2	4	...	25	4	29	...	2	140	...
164	Osceola, Polk Co.	9	10	1	62	2	64	...	3	125	5
165	Oshkosh, Winnebago Co.	87	227	27	4,373	675	5,058	330	94	12,078	36
166	Owen, Clark Co.	1	3	...	219	1	220	4	4	350	...
167	Oxford, Marquette Co.	1	2	...	4	...	4	...	...	...	1
168	Packwaukee, Marquette Co.	1	3	...	4	...	4	...	...	...	2
169	Park Falls, Pierce Co.	7	11	...	208	1	209	4	14	1,105	2
170	Pence, Iron Co.	1	1	...	80	...	80	...	2	200	...
171	Peshtigo, Marinette Co.	5	8	1	165	1	166	...	6	560	3
172	Petersburg, Crawford Co.	2	2	...	13	...	13	...	2	78	...
173	Phillips, Price Co.	5	11	...	331	1	332	10	23	2,390	2
174	Plainfield, Waushara Co.	2	6	...	9	...	9	...	2	105	...
175	Plattville, Grant Co.	13	13	...	79	4	83	4	10	561	3
176	Portage, Columbia Co.	14	15	1	104	158	262	10	12	650	2
177	Port Edwards, Wood Co.	1	1	...	142	5	147	...	6	720	...
178	Pt. Washington, Ozaukee Co.	8	9	7	821	51	872	39	12	1,069	1
179	Port Wing, Bayfield Co.	3	3	...	110	...	110	7	6	590	...
180	Poyssippi, Waushara Co.	2	6	...	9	...	9	...	...	...	2
181	Prairie du Chien, Crawford Co.	18	15	4	203	41	244	10	13	588	8
182	Pratt Junction, Oneida Co.	1	1	...	10	...	10	...	1	45	...
183	Prontice, Price Co.	9	1	...	109	...	109	7	11	672	1
184	Princeton, Green Lake Co.	4	11	...	24	...	34	...	2	65	2
185	Racine, Racine Co.	92	116	62	6,063	1,302	7,265	306	98	9,442	34
186	Readstown, Vernon Co.	3	3	...	21	28	59	5	1	30	...
187	Red Cliff, Buffalo Co.	1	1	...	110	...	110	2	3	350	...
188	Reedsburg, Sauk Co.	12	24	2	186	166	392	4	15	675	1
189	Rhinelander, Oneida Co.	18	26	4	899	30	929	33	36	2,880	4
190	Rib Lake, Taylor Co.	3	7	...	260	...	260	2	19	1,220	...
191	Rice Lake, Barron Co.	12	12	3	290	1	291	...	14	1,028	6
192	Ripon, Fond du Lac Co.	12	13	2	129	123	262	15	6	310	6
193	River Falls, Pierce Co.	15	16	...	50	2	52	...	6	119	9
194	Roberts, St. Croix Co.	2	3	...	6	...	6	...	1	12	1
195	Rusk, Dunn Co.	3	3	...	7	...	7	...	2	20	1
196	St. Croix Falls, Polk Co.	4	3	1	14	1	15	...	1	20	3
197	Sawyer P. O., Door Co.	3	2	1	76	36	111	5	4	280	...
198	Shawano, Shawano Co.	9	7	3	118	6	124	3	5	220	5
199	Saxon, Iron Co.	1	1	...	10	...	10	...	2	200	...
200	Saxeville, Waushara Co.	1	1	...	2	...	2	...	...	...	1
201	Schlesingerville, Wash. Co.	8	9	...	36	...	36	...	7	198	2
202	Sheboygan, Sheboygan Co.	52	48	41	4,648	547	5,195	252	71	7,391	16
203	Shell Lake, Washburn Co.	7	13	...	73	1	74	...	14	1,412	2
204	Soldier's Grove, Crawford Co.	4	4	...	41	40	81	4	1	50	3
205	Solon Springs, Douglas Co.	1	1	...	11	...	11	2	1	20	...
206	Somerset, St. Croix Co.	2	2	...	5	...	5	...	...	...	2
207	Sparta, Monroe Co.	8	12	...	284	310	594	14	3	165	5
208	Spider Lake, Bayfield Co.	1	1	...	75	...	75	3	3	140	...
209	Spring Valley, Pierce Co.	10	13	2	271	2	273	3	13	919	5
210	Stanley, Chippewa Co.	7	18	...	415	5	420	9	23	1,860	2
211	Star Lake, Vilas Co.	1	4	...	225	...	225	1	7	600	...
212	Star Prairie, St. Croix Co.	3	3	1	11	...	11	...	1	15	2
213	Steuben, Crawford Co.	2	2	...	9	...	9	...	2	80	...
214	Stevens Point, Portage Co.	27	28	4	742	129	871	28	35	2,760	7
215	Stoughton, Dane Co.	21	34	5	404	38	442	7	6	690	18

SUMMARIES BY CITIES — Continued.

Number.	Place.	No. of establishments.			Buildings.		Employees.				Boilers.		Other power.
		Under 3 stories.	3 stories and over.		Under 3 stories.	3 stories and over.	Male.	Female.	Total.	Under 16 yrs. of age.	Number.	Power.	
216	Sturgeon Bay, Door Co.	4	4	...	340	50	390	29	13	725	...	...
217	Superior, Douglas Co.	98	125	38	4,249	165	4,414	63	137	15,737	48	...	
218	Thorpe, Clark Co.	3	20	...	93	...	93	...	8	442	2	...	
219	Tomah, Monroe Co.	16	6	1	382	4	386	...	13	930	2	...	
220	Tomahawk, Lincoln Co.	11	15	...	264	6	270	...	18	1,570	3	...	
221	Toney, Gates Co.	2	4	...	102	...	102	9	5	360	1	...	
222	Tramway, Dunn Co.	1	2	...	50	...	50	3	2	125	...	...
223	Tripp, Lincoln Co.	1	2	...	25	...	25	...	4	255	...	...
224	Upson, Iron Co.	12	3	...	78	...	78	...	4	280	...	...
225	Viroqua, Vernon Co.	12	12	...	89	123	212	...	5	299	7	...	
226	Washburn, Bayfield Co.	14	17	1	705	6	711	1	49	3,452	2	...	
227	Watertown, Jefferson and Dodge Cos.	25	18	9	454	151	605	31	33	1,835	1	...	
228	Waukesha, Waukesha Co. ...	26	35	5	1,031	52	1,083	11	28	3,718	8	...	
229	Waupun, Fond du Lac Co. ...	14	18	1	167	87	254	2	10	356	1	...	
230	Wausau, Marathon Co.	34	34	6	1,602	42	1,644	99	52	3,789	6	...	
231	Wautoma, Waushara Co. ...	2	4	...	9	1	10	...	...	...	2	...	
232	Wauwatosa, Milwaukee Co. ...	12	32	7	532	44	576	15	24	1,780	1	...	
233	West Allis, Milwaukee Co. ...	2	10	...	170	21	191	...	5	600	...	...
234	Westby, Vernon Co.	9	10	...	127	104	231	...	3	65	6	...	
235	Westfield, Marquette Co. ...	2	8	...	7	...	7	...	...	...	2	...	
236	West Salem, La Crosse Co. ...	2	2	...	3	2	5	...	...	...	2	...	
237	Whitewater, Walworth Co. ...	11	12	1	70	9	79	...	7	344	5	...	
238	Wild Rose, Waushara Co. ...	2	5	...	11	...	11	...	2	...	2	...	
239	Wilson, St. Croix Co.	2	2	...	4	...	4	...	2	40	...	...
240	Withie, Clark Co.	3	3	...	16	...	16	...	2	70	1	...	
241	Woodville, St. Croix Co.	1	1	...	2	...	2	...	1	15	...	...
242	Woodboro, Oneida Co.	1	4	1	146	4	150	2	7	590	...	...
Total		1059	4247	1144	125020	19216	14236	6851	3597	307014	1261	...	

SUMMARIES BY INDUSTRIES.

Number.	Industries.	No. of establish-ments.	Build-ings.		Employees.				Boilers.		Other power.
			Under 2 stories.	3 stories and over.	Male.	Female.	Total.	Under 16 yrs. of age.	Number.	Power.	
1	Agricultural implements	32	99	23	3,685	12	3,697	22	44	3,923	10
2	Automobiles	5	12	2	491	7	498	29	11	762	1
3	Baking and confectionery	21	8	13	791	1,055	1,846	308	15	945	10
4	Beef and pork packing	15	34	14	1,322	16	1,348	38	44	3,152	1
5	Bicycles	23	21	6	559	2	561	23	5	340	17
6	Boiler works	29	37	3	849	3	852	22	20	1,162	14
7	Book binding	13	8	5	118	151	269	28	.....	.....	14
8	Boots and shoes	32	23	19	1,803	1,106	2,909	234	22	1,420	17
9	Bottling works	13	15	.....	96	42	138	5	7	284	7
10	Boxes, packing	31	36	4	1,196	86	1,282	173	39	2,646	4
11	Boxes, paper and cigar	17	14	8	468	568	1,036	254	15	862	6
12	Brass and copper goods.....	12	24	1	549	3	552	18	11	730	7
13	Breweries	96	195	97	4,063	559	4,612	280	194	14,776	4
14	Brick	25	42	.....	1,060	1	1,061	32	35	2,074	2
15	Brooms and brushes	19	20	2	162	11	173	18	1	25	18
16	Button factories	12	11	1	226	65	291	20	3	.....	9
17	Canning factories	30	52	2	1,320	755	2,075	242	45	2,650	3
18	Chair factories	15	33	32	3,352	289	3,621	278	41	5,180	31
19	Clothing	41	17	27	771	1,828	2,599	78	8	650	35
20	Coal and wood	43	96	3	1,564	8	1,572	16	60	3,910	8
21	Cooperage	25	19	3	197	3	600	17	14	799	13
22	Creameries	86	95	.....	270	25	295	2	88	1,814	3
23	Distilling	6	15	3	86	1	87	.....	13	1,400	3
24	Dry docks	11	19	.....	1,619	2	1,651	18	32	3,770	4
25	Dyeing and cleaning	10	8	2	76	93	169	2	8	249	3
26	Elec. light, gas, water power	141	187	7	2,977	38	3,015	20	270	27,871	22
27	Flour and feed	153	145	104	1,634	50	1,684	18	114	10,660	79
28	Furniture and upholstery	72	105	35	4,514	178	4,692	373	99	7,865	71
29	Furs, gloves and mittens.....	33	24	17	902	1,213	2,115	167	11	477	24
30	Glass works	7	10	1	428	1	429	103	3	230	6
31	Grain elevators	71	31	63	455	5	460	.....	55	7,172	44
32	Hats and caps	6	8	6	377	261	638	42	8	520	3
33	Hardware specialties	34	48	7	1,291	26	1,317	81	18	1,370	19
34	Interior finishing	15	28	4	505	4	509	15	15	703	4
35	Knit goods	22	16	13	443	2,040	2,483	515	17	1,285	13
36	Laundries	122	116	13	416	1,247	1,663	16	104	2,583	19
37	Leather	38	111	56	5,589	39	6,628	64	136	12,234	2
38	Lithographing	12	3	10	480	73	553	42	7	233	8
39	Lumber	199	397	9	18,524	89	18,613	374	744	61,861	18
40	Machine shop and foundry..	247	503	34	14,251	252	14,503	222	226	17,061	101
41	Malting	18	35	49	562	9	571	.....	42	4,080	.....
42	Malleable iron	14	67	.....	3,048	2	3,050	24	66	8,910	2
43	Marble and stone quarries..	23	56	3	943	2	945	.....	27	1,550	13
44	Mattresses and bedding	23	19	15	1,318	143	1,461	80	20	1,450	11
45	Mineral waters	18	21	5	310	21	331	4	12	340	7
46	Mines	15	29	.....	1,799	1	1,800	40	35	3,821	6
47	Paints and oils	14	16	4	214	30	244	5	15	880	1
48	Paper and pulp	46	77	29	4,262	905	5,167	66	170	24,666	9
49	Paper goods	7	.....	7	122	168	290	25	1	50	6
50	Pattern shops	8	8	.....	52	.....	52	.....	.....	.....	5

SUMMARIES BY INDUSTRIES — Continued.

Number.	Industries.	No. of establishments.		Buildings.	Employees.				Boilers.		Other power.
					Male.	Female.	Total.	Under 16 yrs. of age.	Number.	Power.	
51	Plumbing and gas fitting	24	17	14	1,184	57	1,241	36	11	815	15
52	Printing and publishing	290	213	78	2,825	530	3,355	112	19	467	275
53	Railway repair shops	21	65	2	3,671	6	3,677	32	45	3,735	3
54	Saddlery and harness	23	18	10	586	92	678	23	5	309	19
55	Sash, doors and blinds	118	22	31	6,772	47	6,819	331	186	15,468	17
56	Sewer pipe and cement	10	28	2	299	1	300	....	9	825	2
57	Sheet metal	32	46	11	2,130	525	2,655	510	17	3,985	12
58	Soap and grease	16	14	6	174	63	237	10	19	883	1
59	Soda preparations and chemicals	28	35	8	468	218	686	9	17	1,057	16
60	Starch factories	7	4	3	71	6	77	....	7	470	1
61	Stationery	11	1	11	323	156	479	54	3	155	8
62	Stoves, furnaces and steam fittings	16	25	8	1,212	20	1,232	6	8	535	9
63	Tobacco warehouses	26	31	2	531	882	1,413	26	2	100	24
64	Transportation	24	41	3	1,342	13	1,355	1	13	2,055	10
65	Trunks	12	6	18	794	137	931	122	10	710	5
66	Veneer	7	10	4	713	10	723	75	18	1,205	....
67	Wagons and carriages	140	170	28	3,532	29	3,561	31	59	3,988	65
68	Wind mills	6	10	....	99	....	99	1	5	236	....
69	Woodenware	25	26	14	1,774	3	1,777	160	28	3,025	4
70	Wool and worsted mills	18	24	8	413	665	1,078	25	26	1,692	4
71	Other industries	165	183	134	3,568	2,288	5,856	836	99	13,714	76
	Total	3059	4247	1144	125020	19216	144236	6851	3597	307014	1261

SUMMARIES BY CITIES OR LOCATION.

The table for the summaries by location shows a variety of facts. In the first place it points out that the establishments included were located in 242 cities and towns. Then it shows for each of these the number of the establishments, the number of buildings occupied by them, the total number of persons employed at the time of the inspection, classified as to males, females, and those under 16 years of age, the number of boilers and their horse power, and the kind of power used by those who did not employ steam.

As said the establishments were distributed among 242 places. Some of these were cities, others again villages, while again others were under neither city nor village but under town government. Some places again, like Milwaukee and other places, are large and may rightly be regarded as industrial and commercial centers, while others are small, being made up of little else than a factory or mill, or those employed therein. The location of factories and mills is influenced by many causes, among which are the supply of raw material and water power. Saw mills, for instance, as well as many other factories, are often located at some convenient points in the neighborhood of their raw material, regardless of whether it is much of a place or not. Many of these plants are only of a temporary character anyway, and simple houses for the shelter of their hands can be cheaply and quickly constructed. The means of transportation is another important element that necessarily enters into the location of almost any business.

The various facts in this table can perhaps be the more readily seen when the totals for all places are taken as the basis for consideration.

The total number of establishments included is 3,059. Divided equally among the 242 places where located there was thus an average of 12.6 plants to each. This average, however, did not represent even approximately the actual situation. Milwaukee, for instance, included 863 establishments, while many of the places show only one. The former is, of course, the largest center in the state, but there were several places with from

50 to 100 establishments and many others with from 25 to 50 establishments.

The total number of buildings occupied by the establishments included was 5,391. Of these 4,247, or 78.79 per cent., were one and two stories in height and 1,144, or 21.21 per cent., were three stories or more. With 3,059 establishments there was thus an average of 1.76 buildings to each. A fairly complete analysis of the factory buildings for 2,895 of the establishments included here is presented later on in this part.

The total number of persons employed at the time of inspection by the 3,059 establishments included was 144,236. The proportion of males and females is shown by the following figures:

	Number.	Per cent.
Number of male persons	125,020	86.68
Number of female persons	19,216	13.32
Total	144,236	100.00

These figures make the situation plain. The total number was 144,236. Of these the men constituted 125,020, or 86.68 per cent., and the women 19,216, or 13.32 per cent. This relation as between the men and women corresponds closely to that shown elsewhere in this report, especially under "manufacturers' returns."

The figures thus given included persons of all ages. Those under 16 years of age, however, are given separately. Classified according to age on this basis, the following results were obtained:

	Number.	Per cent.
Persons 16 years and over	137,385	95.25
Children under 16 years	6,851	4.75
Total	144,236	100.00

According to these figures, those 16 years of age and over numbered 137,385, while those under 16 years numbered 6,851.

Their respective proportionate relation to the total of both is therefore 95.25 and 4.75 per cent.

The federal census of 1900 showed that the total number of persons employed in the manufacturing industries in this state was 142,076, of whom 5,679, or 4.00 per cent., were children under 16 years of age. With regard to the proportion under 16 there is thus a close agreement in the two cases.

The total number of boilers used by the 3,059 establishments included was 3,597. The total horse powers of these boilers was 307,014, or 85.35 to each. A small proportion of the larger plants and a large proportion of the smaller shops employed other power than steam. As an analysis of the power employed by 2,895 of the above establishments is presented later on, only the total in each case will be given here:

	Horse power.	Per cent.
Steam	307,014	99.59
Electricity	235	.08
Water	256	.08
Gas	507	.16
Other Power	263	.09
Total	308,275	100.00

The power used thus amounted to 308,275 horse power. Of these 307,014 were steam, 235 electricity, 256 water, 507 gas and gasoline, and 263 other forces of various kinds.

With the establishments thus placed at 3,059, and the power at 308,275, the average to each establishment was 100.77 horse power.

CIGAR FACTORIES.

In addition to the establishments included in the table for "Places Inspected," the inspectors also visited and inspected 491 cigar factories and over three hundred places where garments of one kind or another were made. The facts about these establishments are not presented in detail, but those for the places where garments were made were analysed in part III of this report, while a few summaries for the cigar factories are given below.

As said above, 491 places where cigars were made were inspected and reported upon. A few of these factories were large, employing a great number of persons, but most of them were small, many with only one or two persons to the shop. The inspections, however, were carefully made. Cigar factories in this state are affected by special laws, many of the provisions of which are very exacting.

The following figures show the number of persons, classified as to sex, who were employed in these 491 factories:

	Number.	Per cent.
Male	1,822	81.27
Female	420	18.73
Total	2,242	100.00

From this is seen that the total number of persons employed was 2,242, and that of these, 1,822, or 81.27 per cent., were men and 420, or 18.73 per cent., were women. It will be noticed that the percentage of women here is greater than for the factories already analyzed, where they constituted only a little over 13 per cent. of the total. This difference is, of course, readily explained when the nature of the business carried on is considered.

In the following table the persons employed are classified as to age:

	Number.	Per cent.
Under 16 years	165	7.36
Between 16 and 18 years	209	9.32
Over 18 years	1,868	83.32
Total	2,242	100.00

Of the whole number employed, 165, or 7.36 per cent, were under 16 years of age, while 209 persons, or 9.32 per cent., were between 16 and 18 years, and 1,868, or 83.32 per cent were over 18 years, or adult persons. The per cent of children in this case is somewhat greater than that for the factories in the state as a whole.

The following exhibit shows in what part of the buildings the shops were located. A few occupied a whole building, but these were not many in number. The greater proportion occupied a room or two only.

	Number.	Per cent.
Basement	10	2.04
First Floor	300	61.10
Second Floor	157	31.97
Third Floor	8	1.63
Fourth Floor	2	.41
Whole building or more than one floor.....	14	2.85
Total	491	100.00

Here is shown in what part of the building the work was carried on. In 10 cases the shop was located in the basement, in 300 cases, or 61.10 per cent of the total, it was on the first floor. The second floors had 157, or 31.97 per cent. of the shops, while only a few shops were located on the third and fourth floors. In all 14 shops occupied either the whole building partly or wholly or more than one floor.

ANALYSIS OF THE REPORTS OF THE INSPECTION OF 2,895 FACTORY ESTABLISHMENTS.

In order to secure further statistical data that might be of some value the reports of 2,895 establishments were compiled in detail. The facts which were thus obtained from this compilation relate to the establishments, buildings, persons employed, how paid, hours of labor, boilers, power, fire escapes, stairways, elevators, signals, emery and polishing wheels, vats, etc., doors, ventilation, seats for women, accidents, etc. These facts for all the establishments included classified as to Milwaukee, the state outside of Milwaukee and the state as a whole, are presented and analyzed in the following pages.

The first exhibit in order in this series relates to the number of establishments included.

NUMBER ESTABLISHMENTS INCLUDED.

CLASSIFICATION.	ESTABLISHMENTS.		
	Idle.	Number	Per cent.
Milwaukee	11	860	29.71
Outside of Milwaukee	75	2,035	70.29
Total	86	2,895	100.00

In this table is presented the number of the establishments included. In making a brief survey of this table, it will be seen that of the 2,895 establishments included, 860, or 29.71 per cent. were located in Milwaukee, while the balance, 2,035, or 70.29 per cent., were in the state at large; that 2,809 were in operation at the time of inspection, while 86 were idle; only 11 of the idle ones were found in Milwaukee.

NUMBER OF BUILDINGS INSPECTED AND AVERAGE BUILDINGS TO EACH ESTABLISHMENT.

CLASSIFICATION.	Average to each establishment.	BUILDINGS.	
		Number.	Per cent.
Milwaukee	2.10	1,807	35.95
Outside Milwaukee	1.58	3,220	64.05
Total	1.74	5,027	100.00

The information obtained from the above table shows that in all 5,027 buildings were inspected. Of these, 1,807 were found within the metropolis of the state and 3,220 outside of it. In other words, 35.95 per cent of the buildings were in Milwaukee.

The average number of buildings to each establishment was found to be greater in Milwaukee than in the state at large, or 2.10 as against 1.58 for the state outside. The average number of buildings to each establishment, taking the state as a whole, was 1.74.

As has been seen, 5,027 buildings were inspected in detail. Of these 85 are placed in a miscellaneous class. The buildings not in this class have been classified not only according to the material of which constructed, but also according to height.

The result of this classification is presented in the following exhibits:

NUMBER OF WOODEN BUILDINGS.

CLASSIFICATION.	MILWAUKEE.		OUTSIDE MILWAUKEE.		TOTAL.	
	No.	Pr. ct.	No.	Pr. ct.	No.	Pr. ct.
One story	394	56.78	857	47.96	1,251	50.42
Two stories	251	36.17	768	42.98	1,019	41.07
Three stories	41	5.91	129	7.22	170	6.85
Four stories	3	.43	27	1.51	30	1.21
Five stories	3	.43	6	.33	9	.37
Six stories	1	.14	.....	.....	1	.04
Seven stories	1	.14	.....	.....	1	.04
Total	694	100.00	1,787	100.00	2,481	100.00

NUMBER BRICK BUILDINGS.

CLASSIFICATION.	MILWAUKEE.		OUTSIDE MILWAUKEE.		TOTAL.	
	No.	Pr. ct.	No.	Pr. ct.	No.	Pr. ct.
One story	264	25.91	393	34.47	657	30.43
Two stories	255	25.02	480	40.35	715	33.12
Three stories	186	18.25	201	17.63	387	17.92
Four stories	147	14.43	65	5.70	212	9.82
Five stories	83	8.15	16	1.41	99	4.59
Six stories	38	3.73	4	.35	42	1.94
Seven stories	38	3.73	.....	.....	38	1.76
Eight stories	5	.49	1	.09	6	.28
Nine stories	3	.29	.....	.....	3	.14
Total	1,019	100.00	1,140	100.00	2,159	100.00

NUMBER IRON AND STEEL BUILDINGS.

CLASSIFICATION.	MILWAUKEE.		OUTSIDE MILWAUKEE		TOTAL.	
	No.	Per ct	No.	Per ct.	No.	Per ct.
One story	33	42.31	55	41.99	88	42.11
Two stories	17	21.80	44	33.59	61	29.18
Three stories	4	5.13	19	14.50	23	11.00
Four stories	7	8.97	5	3.82	12	5.74
Five stories	7	8.97	2	1.53	9	4.31
Six stories	2	2.57	4	3.05	6	2.87
Seven stories	7	8.97	1	.76	8	3.83
Eight stories	1	1.28	1	.76	2	.96
Total	78	100.00	131	100.00	209	100.00

NUMBER STONE BUILDINGS INSPECTED.

CLASSIFICATION	MILWAUKEE.		OUTSIDE MILWAUKEE.		TOTAL.	
	No	Per ct	No.	Per ct.	No.	Per ct.
One story	2	100.00	36	39.56	38	40.86
Two stories			33	36.23	33	35.48
Three stories			19	20.53	19	20.43
Four stories			3	3.30	3	3.23
Total	2	100.00	91	100.00	93	100.00

In the four preceding tables is shown in order for Milwaukee, outside of Milwaukee, and the state, the respective number of buildings, together with their height, that were constructed of wood, brick, iron and stone.

The first in order of the four tables gives the wooden buildings. It shows a total of 2,481 such buildings, of which 694 were located in Milwaukee and 1,787 outside of that city.

In this table the wooden structures are also classified as to height. Thus for the state, as a whole, it is seen that 1,251, or 50.42 per cent of the total, were one story structures; that 1,019, or 41.07 per cent of the whole, were two story structures; that 170 were three stories; that 30 were four stories, 9 five stories, and 1 six and seven stories, respectively. These facts, as said, are for the state. Similar classifications for Milwaukee and the state outside of Milwaukee are also given in the table, thus enabling many comparisons on this point to those who may desire to make them.

The second in order of the preceding four tables relate to the brick buildings. For the state these structures number 2,159, of which 1,019 were in Milwaukee and 1,140 outside of that city. These facts may be seen from the footings of the table. The table further shows, with regard to the height of these structures, that 657, or 30.43 per cent of the total, were one story high; that 715, or 33.12 per cent of the total, were two stories in height; that 387, or 17.92 per cent of the total were three stories high; and that 212, or nearly 10 per cent, were four story buildings. The remaining buildings run from 5 up to 9 stories, but they constitute a comparatively small proportion of the whole. The table also gives similar comparisons for Milwaukee and the state outside.

The iron structures are shown in the third of the four tables. This shows a total of 209 such buildings. Of these 78 are in Milwaukee and 131 outside of it. Taking the state as a whole and comparing these buildings as to height, and it is found that the greater proportion are only one story structures. In fact, this class includes 42.11 per cent of the total. The two story structures have less than one-third of the total in its class, while 11.00 per cent only were three story buildings. The other classes include only a few buildings each. The relation for Milwaukee and the state outside of it, when considered separately, show a proportion in each class that does not vary greatly from the figures given here.

Stone buildings—by this is meant buildings constructed of granite or any other stone outside of bricks—were scarce. They were even fewer in number than those erected of iron, etc. Evidently stone is not a favorite material for factory structures. The last table of the foregoing four shows that only 93 factory buildings in the whole state were of stone. Of these 2 were in Milwaukee and 91 outside.

In height these buildings varied from one to four stories. The one story class for the state includes 38 buildings, the two story 33, the three story 19, and the four story 3 buildings.

The following is a sort of a summary of the buildings thus presented in the four preceding tables:

TOTAL NUMBER OF BUILDINGS.

CLASSIFICATION.	MILWAUKEE.		OUTSIDE MILWAUKEE.		TOTAL.	
	No.	Per ct.	No.	Per ct.	No.	Per ct.
One story	693	38.65	1,341	42.59	2,034	41.16
Two stories	523	29.17	1,305	41.44	1,828	36.99
Three stories	231	12.88	264	11.69	499	12.12
Four stories	157	8.76	100	3.18	257	5.20
Five stories	93	5.19	24	.76	117	2.37
Six stories	41	2.29	8	.25	49	.99
Seven stories	46	2.56	1	.03	47	.95
Eight stories	6	.23	2	.06	8	.16
Nine stories	3	.17			3	.06
Total	1,793	100.00	3,149	100.00	4,942	100.00

As will be seen by reference to the above table, there were in all 4,942 buildings inspected. Of these, 1,793 were in Mil-

waukee. In point of number the one story structures stand at the head of the list, with the two story buildings a close second. The aggregate number of one story buildings is 2,034, or 41.16 per cent of the total. Of these 693 were found in Milwaukee, while 1,341 were distributed throughout the state. The two story structures number 1,828, or 36.99 per cent of the total. The total number of buildings three stories and over numbered 1,080, with a combined percentage of 21.85 per cent.

The buildings presented in the above five tables do not constitute all the buildings inspected or used by the 2,895 establishments. To these we must add a table of miscellaneous structures, which could not very well be classified with the above.

TOTAL NUMBER MISCELLANEOUS STRUCTURES.

	Number.	Per cent.
Elevators, average height, 59 ft.	59	69.42
Cribbs, average height, 105 ft.	6	7.07
Dock structures, average height, 45 ft.	16	18.83
Kilns, average height, 80 ft.	1	1.17
Clearing house, average height, 40 ft.	1	1.17
Tower, average height, 80 ft.	1	1.17
Hide house, average height, 60 ft.	1	1.17
Total	85	100.00

The miscellaneous structures number 85. Of these 59, or 69.42 per cent, are used as elevators, while the remaining 26 buildings are used for various other purposes.

By adding the 85 constituting the total number under this head, to the 4,942 buildings given in the foregoing tables, we arrive at the total 5,027, which is the sum total of buildings inspected.

CLASSIFICATION AS TO KIND OF BUILDINGS.

CLASSIFICATION.	MILWAUKEE.		OUTSIDE. MILWAUKEE.		TOTAL.	
	No.	Per ct.	No.	Per ct.	No.	Per ct.
Frame, wood	694	38.71	1,787	56.75	2,481	50.20
Brick	1,019	56.83	1,140	36.20	2,159	43.69
Iron	78	4.35	131	4.16	209	4.23
Stone	2	.11	91	2.89	93	1.88
Total	1,793	100.00	3,149	100.00	4,942	100.00

The above table shows for Milwaukee, the state outside, and for the state as a whole the total number of buildings, together with the proportion of each kind when the buildings are classified according to the material of which they were constructed. In this classification the 85 miscellaneous buildings were not included.

The total buildings for the state were 4,942. Of these 2,481, or 50.20 per cent, were constructed of wood, 2,159, or 43.69 per cent, of brick, 209, or 4.23 per cent, of iron, and 93, or 1.88 per cent, of stone.

Between Milwaukee and the state at large the relations differ somewhat from those given. In the former place the wooden structures made up 38.71 per cent of the total, and in the state outside, 56.75 per cent of the total. The brick structures again constituted 56.85 per cent of the buildings in Milwaukee and 36.20 per cent of those outside. The iron and stone structures were not very numerous in any part of the state.

RESPECTIVE PROPORTION OF THE DIFFERENT KINDS OF BUILDINGS
IN MILWAUKEE AND STATE OUTSIDE.

CLASSIFICATION.	NUMBER OF BUILDINGS.			PER CENT.		
	Milw'kee	Outside.	State.	Milw'kee	Outside.	State.
Frame or wood	694	1,787	2,481	27.97	72.03	100.00
Brick	1,019	1,140	2,159	47.19	52.81	100.00
Iron	78	131	209	37.32	62.68	100.00
Stone	2	91	93	2.15	97.85	100.00
Total	1,793	3,149	4,942	36.28	63.72	100.00

Here are found the respective shares of Milwaukee and the rest of the state in the different kinds of buildings included. Of the wooden buildings Milwaukee had 27.97 per cent, of the brick 47.19 per cent, of the iron 37.32 per cent, of the stone buildings 2.15 per cent, while of the total buildings included Milwaukee had 36.28 per cent.

RESPECTIVE PROPORTION OF THE BUILDINGS IN MILWAUKEE AND OUTSIDE OF THAT CITY WHEN CLASSIFIED AS TO HEIGHT.

CLASSIFICATION.	NUMBER.			PER CENT.		
	Milw'kee	Outside.	Total.	Milw'kee	Out-side	Total.
One story	693	1,341	2,304	34.02	65.98	100.00
Two stories	523	1,305	1,828	28.61	71.39	100.00
Three stories	231	368	599	38.56	61.44	100.00
Four stories	157	100	257	61.69	38.91	100.00
Five stories	93	24	117	79.49	20.50	100.00
Six stories	41	8	49	83.67	16.33	100.00
Seven stories	46	1	47	97.87	2.13	100.00
Eight stories	6	2	8	75.00	25.00	100.00
Nine stories	3	.....	3	100.00	.....	100.00
Total	1,793	3,149	4,942	36.28	63.72	100.00

This table is a comparison between Milwaukee and the rest of the state. It shows how the two compare with reference to the height of buildings. Of the one and two story structures Milwaukee had proportionally less than what would seem to be its share, this from the fact that it had over 36 per cent of the total buildings included. Of all the other classes of buildings, even the three story ones, Milwaukee evidently had more than its share. The reason why the buildings are relatively higher in Milwaukee than in the state at large is probably due to the higher price of land in that city.

NUMBER PERSONS EMPLOYED.

CLASSIFICATION.	MALE.		FEMALE.		TOTAL.	
	Number.	Per cent.	Number.	Per cent.	Number	Per cent.
Milwaukee	48,276	40.61	8,959	47.19	57,235	41.52
Outside of Milwaukee ..	70,611	59.39	10,022	52.81	80,633	58.48
Total	118,887	100.00	18,981	100.00	137,868	100.00

The preceding table deals with the number of persons employed in the establishments included. The total persons for all establishments is 137,868, and of these 118,887 were men and 18,981 were women.

Of the total number of men employed Milwaukee shows 48,276, or 40.61 per cent, and the state outside 18,981 persons.

of the women Milwaukee had 8,959, or 47.19 per cent, and the rest of the state 10,022, or 52.81 per cent.

Of the total number of persons, when both sexes are included, Milwaukee shows 57,235 persons, or 41.52 per cent, and the rest of the state 80,633 persons, or 58.48 per cent of the total.

In the following exhibit the persons employed in Milwaukee and outside, as well as for the state as a whole, are classified as to sex:

CLASSIFICATION AS TO SEX.

CLASSIFICATION.	NUMBER.			PER CENT.		
	Male.	Female.	Total.	Male.	Female.	Total.
Milwaukee	48,276	8,959	57,235	84.37	15.63	100.00
Outside of Milwaukee...	70,611	10,022	80,633	87.57	12.43	100.00
Total	118,887	18,981	137,868	86.23	13.77	100.00

NUMBER OF CHILDREN.

CLASSIFICATION.	BETWEEN 14-16 YEARS.		AFFIDAVITS.		UNDER 14 YRS.		PERMITS.	
	No.	Pr. ct.	No.	Pr. ct.	No.	Pr. ct.	No.	Pr. ct.
Milwaukee	3,396	56.92	2,768	61.29	167	32.12	128	33.07
Outside Milwaukee	2,570	43.08	1,748	38.71	353	67.88	259	66.93
Total	5,966	100.00	4,516	100.00	520	100.00	387	100.00

During the past year the inspectors found 6,486 children under the age of 16 employed in the factories throughout the state. Of this total, 5,966 were between 14 and 16, and 3,396, or 56.92 per cent of these, were found in Milwaukee. Those having affidavits numbered 2,768. Of the 520 under 14, 167, or only 32.12 per cent, were in Milwaukee, and 128 of these had the required permit.

In comparing this year's report with that of previous years, it is conclusively shown that through rigid enforcement of the child labor laws, the employment of children has ceased to increase at such a rapid rate. Instead, children have been taken out of the factories and workshops and placed in the schools of the state.

The table also shows that those between 14 and 16 years of age numbered 5,966, of whom 3,396, or 56.92 per cent, were in Milwaukee, and 2,570, or 43.08 per cent, were in the state outside. From a comparison between these figures and those for the state as a whole, it will be found that the proportion of children to the whole number employed was considerably greater for Milwaukee than for the state outside.

The next space in the table relates to affidavits as to age. It shows that of the 5,966 children between 14 and 16 years, 4,516, or 5.7 had the affidavits as provided by law. Of those who thus had affidavits 2,768, or 61.29 per cent, were in Milwaukee, and 1,748, or 38.71 per cent, outside. As only 4,516 out of the 5,966 had affidavits, and as such affidavits are required by law it necessarily follows that 1,450 children in this class alone were employed in violation of the factory laws.

The table further shows 520 children under 14 years of age of whom 167, or 32.12 per cent, were for Milwaukee and 353, or 67.88 per cent, were for the state outside. Of the whole number only 387, or 74.4 per cent, had the requisite permit, leaving 133, or 25.6 per cent, who were employed in violation of the law.

At one inspection of the factories in the state it was thus found that 1,450 children between 14 and 16 years and 133 under 14 years of age were illegally employed. At each of the subsequent inspections many violations of this kind were also met with, which all goes to show how readily the child labor laws are violated.

The following four tables relate to monthly and weekly payment of wages, and to whether wages were paid in cash or checks.

NUMBER OF ESTABLISHMENTS PAYING WAGES WEEKLY, MONTHLY, ETC.

CLASSIFICATION.	MILWAUKEE.		OUTSIDE MILWAUKEE.		TOTAL.	
	Number	Per cent.	Number	Per cent.	Number	Per cent.
Weekly	535	62.21	999	49.69	1,534	52.99
Semi-monthly	175	20.35	268	13.16	443	15.30
Monthly	49	5.70	645	31.70	694	23.97
Not reporting	101	11.74	123	6.05	224	7.74
Total	860	100.00	2,035	100.00	2,895	100.00

NUMBER OF PERSONS RECEIVING THEIR WAGES WEEKLY, MONTHLY, ETC.

CLASSIFICATION.	MILWAUKEE.		OUTSIDE MILWAUKEE.		TOTAL.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Weekly	27,492	48.03	22,128	27.44	49,620	35.99
Semi-monthly	19,320	33.76	24,366	30.21	43,686	31.69
Monthly	5,460	9.54	30,780	38.13	36,240	26.28
Not reporting	4,963	8.67	3,359	4.17	8,322	6.04
Total	57,235	100.00	80,633	100.00	137,868	100.00

NUMBER AND PER CENT. OF ESTABLISHMENTS REPORTING AS TO WHETHER THEY PAID WAGES IN CASH OR CHECKS.

CLASSIFICATION.	MILWAUKEE.		OUTSIDE MILWAUKEE.		TOTAL.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Cash	624	72.56	1,410	69.29	2,034	70.26
Checks	134	15.58	483	23.73	617	21.31
Both	1	.12	11	.54	12	.42
Not reporting	101	11.74	131	6.44	232	8.91
Total	860	100.00	2,035	100.00	2,895	100.00

NUMBER AND PER CENT. OF THE PERSONS WHO WERE REPORTED UPON AS TO WHETHER THEY WERE PAID IN CASH OR CHECKS.

CLASSIFICATION.	MILWAUKEE.		OUTSIDE MILWAUKEE.		TOTAL.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Cash	36,994	64.64	47,210	58.55	84,204	61.08
Checks	15,248	26.64	28,700	35.59	43,948	31.87
Both	30	.05	306	.38	336	.25
Not reporting	4,963	8.67	4,417	5.48	9,380	6.80
Total	57,235	100.00	80,633	100.00	137,868	100.00

Of the four preceding tables the first in order shows the respective number of establishments in Milwaukee, outside of Milwaukee, and for the state as a whole, that paid the wages weekly and monthly, etc.

Taking the state as a whole it is found that of the 2,895 es-

tablshments included, 1,534, or 52.99 per cent., paid their employes their wages weekly; that 443 establishments, or 15.30 per cent, paid semi-monthly; that 694 establishments, or 23.97 per cent, paid monthly, and that 224 establishments did not report regarding this matter.

In considering Milwaukee and the rest of the state separately, some interesting facts may be noticed. In the former place a much greater proportion of the plants paid their hands weekly and semi-monthly. The figures on these points show that for Milwaukee, 62.21 and 20.35 per cent of the establishments paid weekly and semi-monthly, respectively, while for the rest of the state the corresponding relations were 49.09 and 13.16 per cent. When it comes to those paying monthly, on the other hand, Milwaukee falls behind, with only 5.70 per cent of its plants in this class, as against 31.70 per cent for the state at large outside of Milwaukee.

The second in order of the four preceding tables shows the respective number of the employes who received their wages weekly, semi-monthly, and monthly. In this case also these facts are shown for Milwaukee, the state outside of that city, and the state as a whole.

In this case also the figures for the state as a whole will be considered first. Of the total, or 137,868 persons included, 49,620, being 35.99 per cent of the former, were paid weekly, while 43,686 persons, or 31.69 per cent of these, were paid semi-monthly, and 36,240, or 26.28 per cent, were paid monthly. Those for whom the pay day was not reported numbered 8,322, or 6.04 per cent of the total. From these figures it thus appears that 36 per cent of the factory employes in this state are paid off weekly, and that nearly 32 per cent are paid off twice a month, while only a little over one-fourth have to go a whole month between pay days.

In comparing Milwaukee and the rest of the state, the following results appear: In Milwaukee 48.03 per cent of the factory hands were paid weekly, 33.76 per cent semi-monthly, and 9.54 per cent monthly. In the state outside of Milwaukee 27.44 per cent were paid weekly, 30.21 per cent semi-monthly, and 38.18

per cent monthly. These figures certainly place Milwaukee in a very favorable light.

The third table relates to the establishments that paid the wages in cash and checks, respectively. Of the 2,895 establishments included for the state as a whole, 2,034, or 70.26 per cent, paid the wages in cash, while 617, or 21.31 per cent paid in checks, and 12, or .42 per cent, paid in both ways as things happened to come.

In Milwaukee 72.56 per cent of the establishments paid in cash and 15.58 per cent in checks. Outside of that city 69.29 per cent paid cash and 23.73 per cent in checks. Cash payments are undoubtedly the mostly desirable from the employee's point of view. From the employers standpoint there would seem to be little or no choice between the two methods.

In the last of the four preceding tables is shown the number and proportion of the employes who were paid in cash and checks. As shown before, 137,868 persons are included for the state. Of these 84,204, being 61.08 per cent of the total, were paid in cash, 43,948, or 31.87 per cent in checks, 336 persons, or .25 per cent both ways, while for 9,380 persons no reports were made. Those paid in cash thus numbered nearly twice as many as those paid in checks.

In Milwaukee 64.64 per cent were paid in cash and 26.64 per cent of the total were paid in checks. In the state outside, this relation stood 58.55 and 35.59 per cent, respectively.

Milwaukee thus leads the rest of the state, not only in weekly payment, but in cash payment of wages.

CLASSIFICATION OF THE HOURS OF LABOR DAILY AND THE NUMBER OF ESTABLISHMENTS IN EACH CLASS.

CLASSIFICATION.	MILWAUKEE.		OUTSIDE MILWAUKEE.		TOTAL.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
8 hours or less	65	7.56	59	1.92	104	3.59
9 hours	160	18.60	80	3.93	240	8.29
9½ hours	18	2.09	7	.34	25	.86
10 hours	580	67.44	1,638	80.49	2,218	76.62
11 hours	4	.47	56	2.75	60	2.07
12 hours and over	25	2.91	143	7.03	168	5.80
Irregular	8	.93	72	3.54	80	2.77
Total	800	100.00	2,035	100.00	2,895	100.00

Here the establishments are classified according to their hours of labor daily. Those, for instance, who run their factories eight hours per day are combined in one class, and those who run nine hours in another, and so on. The classifications on this basis run from eight hours or less to nine, nine and one-half, ten, eleven and twelve hours per day and over.

Those running eight hours per day are not as yet very numerous. At the time of this inspection they only constituted 104, or 3.59 per cent of the total number. The nine hour class was about twice as large, including 240 establishments, or 8.29 per cent of the total. The nine and one-half hour class had only 25 establishments, but the ten hour one had 2,218, or 76.62 per cent of the total. In the eleven hour class 60 establishments were discovered and in the twelve hour and over, 168, or 5.80 per cent of the total, were found. The proportion in the last two cases is comparatively small. Considering everything, however, it is big enough. The tendency, as well as a good part of the industrial struggle of today, is for shorter working hours, and it is almost surprising that as many as the number given should have been able to resist this pressure up to the present time.

The shortest hours were found for those located in Milwaukee. This is natural as manufacturing always reaches its most advanced point in industrial centers. In Milwaukee only 4.31 per cent of the establishments had a working day of over 10 hours, while for the state the working hours exceeded 10 in 13.32 per cent of the plants. The greatest number of the plants in both cases had a 10 hour working day, and this can perhaps be regarded as the standard for this state.

CLASSIFICATION OF THE HOURS OF LABOR DAILY AND THE NUMBER PERSONS IN EACH CLASS.

CLASSIFICATION.	MILWAUKEE.		OUTSIDE MILWAUKEE.		TOTAL.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
8 hours or less	4,271	7.46	377	.47	4,648	3.37
9 hours	6,629	11.58	1,941	2.41	8,570	6.22
9½ hours	1,033	1.81	70	.08	1,103	.80
10 hours	39,517	69.04	68,230	84.62	107,747	78.15
11 hours	224	.39	3,336	4.14	3,560	2.58
12 hours and over	5,484	9.58	5,369	6.66	10,853	7.87
Irregular hours	77	.14	1,310	1.62	1,387	1.01
Total	57,235	100.00	80,633	100.00	137,868	100.00

The daily hours of labor for those who are employed in the factories in this state are well shown in the preceding table. This table resembles closely the one which precedes it. The classifications are the same. It covers the same field. In fact the two tables differ only in this, that the former was devoted to the establishments or employers, while the latter deals with the employes.

The eight hour class included 4,271 persons, or 7.46 per cent of the total for Milwaukee, and 377 persons, or .47 per cent of the total for the state outside, while for the state as a whole it included 4,648 persons, or 3.37 per cent of the total.

The nine hour class included 8,570 persons, for the state as a whole, or 6.22 per cent of the total. For Milwaukee and the rest of the proportion in this class was 11.58 and 2.41 per cent, respectively.

The nine and one-half hour class has a small number of persons only. For the state as a whole they constitute less than one per cent of the total.

The ten hour class was the heaviest. For Milwaukee it included 39,517 persons, or 69.04 per cent of the total; for the state outside it had 68,230 persons, or 84.62 per cent of the total; and for the state as a whole, 107,747 persons, or 78.15 per cent of the total.

The eleven hour class was small. It had a little over one-third of one per cent of the persons in Milwaukee, and 4.14 per cent of those outside, while for the state as a whole the figure was 2.58 per cent.

The twelve hour and over class was larger. In fact it had nearly 8 per cent of the persons for the state as a whole, and 9.58 per cent of these in Milwaukee and 6.66 per cent for the state outside.

Those working irregular hours amounted to only about 1 per cent of the total for the state.

The facts shown in the above two tables are important and deserve close attention.

TOTAL NUMBER OF BOILERS, NUMBER INSURED, NUMBER INSPECTED
THOUGH NOT INSURED, AND NUMBER NOT INSPECTED.

CLASSIFICATION.	MILWAUKEE.		OUTSIDE MILWAUKEE.		TOTAL.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Insured	643	73.40	1,528	61.76	2,171	64.81
Other boilers inspected..	19	2.17	229	9.26	248	7.40
Not inspected	214	24.43	717	28.98	931	27.79
Total	876	100.00	2,474	100.00	3,350	100.00

In the above table for the state as a whole, it is seen that the establishments included made use of 3,350 steam boilers. Of these boilers 2,171, or 64.81 per cent of the total, were insured in some insurance company. As the insurance companies usually make it a practice to regularly inspect the boilers on which insurance is carried, it can perhaps be taken for granted that the boilers in this case were under more or less strict supervision of inspectors. In addition to this, 248 boilers, or 7.40 per cent of the total, were inspected now and then by the direction of the proprietors. This left 931 boilers, or 27.79 per cent, that were not inspected or under any other supervision than that of the fireman or engineer in charge.

As between Milwaukee and the state outside the former had a larger proportion of insured boilers and a slightly smaller proportion of those that were not inspected at all.

Of the 3,350 boilers for the state, 876, or 26.15 per cent, were in Milwaukee, and 2,474, or 73.85 per cent, outside in the state.

BOILERS INSPECTED AND NOT INSPECTED.

CLASSIFICATION.	MILWAUKEE.		OUTSIDE MILWAUKEE.		TOTAL.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Inspected	662	75.57	1,757	71.02	2,419	72.21
Not inspected	214	24.43	717	28.98	931	27.79
Total	876	100.00	2,474	100.00	3,350	100.00

The respective number of boilers that thus received some attention in the way of inspection, and those that did not, are shown in the above table. Of the total for the state, 2,419, or 72.21 per cent, were inspected and 931, or 27.79 per cent, were not inspected. As was pointed out above, Milwaukee leads the rest of the state in the proportion of the boilers inspected.

HORSE POWER.

CLASSIFICATION.	Number boilers.	Average power to each boiler	HORSE POWER.	
			Number.	Per cent.
Milwaukee	876	110.5	96,837	32.27
Outside of Milwaukee	2,474	82.1	203,266	67.73
Total	3,350	89.6	300,103	100.00

This table shows that the total horse power of all the boilers in the state was 300,103, of which 96,837, or 32.27 per cent, was for the 876 boilers in Milwaukee, and 203,266 horse power, or 67.73 per cent, were for the 2,474 boilers located in factories outside of Milwaukee. The average number of horse power to each boiler was 110.5 in Milwaukee, 82.1 outside and 89.6 for the state as a whole.

NUMBER OF ESTABLISHMENTS USING STEAM FOR POWER, AVERAGE
NUMBER OF BOILERS AND HORSE POWER TO EACH ESTABLISH-
MENT.

CLASSIFICATION.	Number of establish- ments using steam power.	Average number of boilers to each establish- ment.	Average number of horse power to each estab- lishment.
Milwaukee	489	1.79	198
Outside of Milwaukee	1,269	1.95	160
Total	1,758	1.91	171

The establishments using steam power, as is seen in above table numbered 1,758, of which 489, or 27.24 per cent, were in Milwaukee, and 1,269, or 72.76 per cent outside.

The average number of boilers and horse power to each establishment was 1.79 and 198, respectively, for Milwaukee, and

1.95 and 160, respectively, for the state outside, while for the state as a whole the numbers were 1.91 and 171, respectively.

NUMBER OF PERSONS EMPLOYED IN PLACES WHERE THE BOILERS WERE INSPECTED AND WHERE THEY WERE NOT INSPECTED, RESPECTIVELY.

CLASSIFICATION.	MILWAUKEE.		OUTSIDE MILWAUKEE.		TOTAL.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
No. employed where inspected	42,141	87.06	59,994	83.77	102,135	85.10
No. employed where not inspected	6,265	12.94	11,620	16.23	17,885	14.90
Total	48,406	100.00	71,614	100.00	120,020	100.00

This table shows that the total number of persons employed in the 1,758 establishments in the state which used steam for power was 120,020. Of this number, 102,135, or 85.10 per cent, were employed in places where the boilers were inspected and 17,885 persons, or 14.90 per cent, were employed in places where the boilers were not regularly inspected.

As compared with the outside, Milwaukee leads in the proportion of the persons who were employed where the safety of the boilers were looked after.

CLASSIFICATION OF THE ESTABLISHMENTS ACCORDING TO KIND OF POWER USED.

CLASSIFICATION.	MILWAUKEE.		OUTSIDE MILWAUKEE.		TOTAL.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Est. using steam	459	56.86	1,269	62.36	1,758	60.72
Est. using gas	102	11.86	241	11.84	343	11.85
Est. using electricity ..	57	10.12	137	6.73	224	7.74
Est. using water .....	.....	.....	125	6.14	125	4.32
Est. using hand	8	.93	148	7.28	156	5.39
Est. using no power ..	174	20.23	115	5.65	289	9.98
Total	860	100.00	2,035	100.00	2,895	100.00

Here the establishments are classified according to the power used. As has been pointed out already, 1,758 used steam. This is 60.72 per cent of the total for the state. Gas was used by 343 establishments and electricity by 222. Those using water

power numbered 125, constituting 4.32 per cent of the total. Comparisons are also made between Milwaukee and the state outside.

KIND OF POWER USED AND NUMBER OF PERSONS EMPLOYED.

CLASSIFICATION.	MILWAUKEE.		OUTSIDE MILWAUKEE.		TOTAL.	
	No.	Pr. ct.	No.	Pr. ct.	No.	Pr. ct.
Emp. where steam is used	48,406	84.57	71,614	88.81	120,020	87.05
Emp. where gas is used	2,634	4.60	2,426	3.01	5,060	3.67
Emp. where electricity is used.....	3,021	5.28	2,568	3.18	5,589	4.05
Emp. where water is used			1,237	1.54	1,237	.90
Emp. where hand is used	256	.45	852	1.06	1,108	.80
Emp. where no power is used.....	2,918	5.10	1,936	2.40	4,854	3.53
Total	57,225	100.00	80,633	100.00	137,868	100.00

In the above table the persons employed have been classified according to the kind of power used in the establishments where employed. Without going into details it can perhaps be said that 87.05 per cent of the 137,868 persons included were employed in establishments using steam; that 3.67 per cent were employed in places using gas; that 4.05 per cent were employed in places with electric power. These figures are for the state as a whole. The relations for Milwaukee do not vary materially from those given above.

FIRE ESCAPES.

CLASSIFICATION.	FIRE ESCAPES.		BALCONIES ATTACHED.	
	Number.	Per cent.	Number.	Per cent.
Milwaukee	569	61.58	450	66.86
Outside of Milwaukee	355	38.42	223	33.14
Total	924	100.00	673	100.00

This table is devoted to the interesting subject of fire escapes. The law requires that each establishment that is 3 or more stories in height, and employing 25 men or more, be provided with the necessary escape for protection in case of fire.

After all, the story of this table is not so very interesting. It simply shows that placed in order or ready for use in case of

emergency there were in the state as a whole, 924 places equipped with fire escapes and that of these Milwaukee had 61.58 per cent and the outside 38.42 per cent. The table also shows the places which in addition to the fire escape had balconies attached so as to facilitate descent. In themselves these figures throw but little light on the situation. When it is added, however, that by a construction of the law, about 995 factory buildings might be said to come within the provision requiring escapes, the figures assume a more important aspect. They then show what the condition in the state really was. They point out that 71 places were lacking escapes and were thus in violation of the law. It is needless to say these escapes were ordered. In addition to this, many of those already erected were also ordered repaired, and in some cases it was even found necessary to order a second or a third escape.

NUMBER OF BUILDINGS HAVING STANDPIPES, HOSE CONNECTIONS, AND AUTOMATIC SPRINKLERS.

CLASSIFICATION.	OUTSIDE.		INSIDE.		HOSE CONNECTIONS.		AUTOMATIC SPRINKLER.	
	No.	Pr. ct.	No.	Pr. ct.	No.	Pr. ct.	No.	Pr. ct.
Milwaukee	293	60.91	115	17.72	292	23.35	150	32.97
Outside Milwaukee	185	39.09	534	82.28	738	71.65	305	67.03
Total	481	100.00	649	100.00	1,030	100.00	455	100.00

NUMBER STANDPIPES, HYDRANTS, PUMPS, ETC.

CLASSIFICATION.	OUTSIDE.		INSIDE.		HYDRANTS.		AUTOMATIC SPRINKLER.	
	No.	Pr. ct.	No.	Pr. ct.	No.	Pr. ct.	No.	Pr. ct.
Milwaukee	470	54.21	263	16.60	14	24.56	5	23.81
Outside Milwaukee	397	45.79	1,321	83.40	43	75.44	16	76.19
Total	867	100.00	1,584	100.00	57	100.00	21	100.00

The above tables relate to standpipes, hose connections, automatic sprinklers, hydrants, pumps, etc.

All in all the number of buildings having outside standpipes numbered 481, inside, 649; hose connections, 1,030; automatic sprinklers, 455.

Of this number 60.91 per cent of the outside standpipes, 17.72 inside, 28.35 hose connections and 32.97 per cent. of the automatic sprinklers were found to be in Milwaukee.

In addition to the number of buildings having standpipes, etc., we have a table showing the number of each kind. In the 1,130 buildings having these standpipes, 867 were outside and 1,584 inside standpipes. 470, or 54.21 per cent of the outside standpipes and 263, or 16.60 per cent, of the inside standpipes were in Milwaukee. Besides this, the table shows that there were 57 hydrants and 21 pumps inspected.

NUMBER OF STAIRWAYS AND OTHER MEANS OF GETTING DOWN FROM STORIES ABOVE GROUND FLOOR.

CLASSIFICATION.	MILWAUKEE.		OUTSIDE MILWAUKEE.		TOTAL.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Inside stairways	1,386	80.54	2,425	75.64	38.11	77.35
Outside stairways	237	13.77	693	18.81	840	17.05
Tramways	78	4.53	43	1.34	121	2.45
Other means	20	1.16	135	4.21	155	3.15
Total	1,721	100.00	3,206	100.00	4,927	100.00

Stairways also came within the inspection laws and were examined. From the information gathered from the above figures we notice that the majority of stairways are inside and enclosed. Of the total 4,927 making up the stairways and other means of escape, 3,811, or 77.35 per cent, are on the inside of the buildings; 1,386, or 80.54 per cent, of the 1,721 different means of descent are in Milwaukee, leaving the balance to be found in buildings scattered throughout the state.

Under the head of "Other means of escape" is included runways, ladders, etc., and these only numbered 155, or 3.15 per cent of the total number inspected. Those being in poor condition were ordered repaired.

NUMBER OF BUILDINGS HAVING ELEVATORS, AND NUMBER OF ELEVATORS USED.

CLASSIFICATION.	BUILDINGS.		ELEVATORS.	
	Number.	Per cent.	Number	Per cent.
Milwaukee	485	50.21	615	52.56
Outside Milwaukee	481	49.79	555	47.44
Total	966	100.00	1,170	100.00

KIND OF DOORS USED ON ELEVATORS.

CLASSIFICATION.	MILWAUKEE.		OUTSIDE MILWAUKEE.		TOTAL.	
	Number	Per cent.	Number.	Per cent.	Number	Per cent.
Automatic doors	105	17.07	152	27.39	257	21.97
Bars	186	30.24	193	34.78	379	32.39
Lift gates	130	21.14	79	14.23	209	17.88
Swinging doors	54	8.78	52	9.37	106	9.06
Sliding doors	140	22.77	79	14.23	219	18.72
Total	615	100.00	555	100.00	1,170	100.00

NUMBER OF HOISTS.

CLASSIFICATION.	HOISTS.	
	Number.	Per cent.
Milwaukee	371	65.09
Outside Milwaukee	199	34.91
Total	570	100.00

The above tables are devoted to showing the number of buildings having elevators and hoists, the total number of each and the kind of doors used by the same. In looking over the figures we see that in all there were 1,170 elevators used in 966 buildings and 52.56 per cent of these were in Milwaukee.

As to the kind of doors used on the elevators it was found that bars were used in the largest number of cases, with a number of 379, or 32.39 per cent of total. Next in order came automatic

doors with 257, or 21.97 per cent; sliding doors, 219; lift gates, 209, and swinging doors, 106.

Of the 570 hoists inspected, 65.09 per cent were in Milwaukee.

Those not up to the standard were ordered repaired.

NUMBER OF BUILDINGS HAVING COMMUNICATIONS BETWEEN WORK ROOMS AND ENGINE ROOM.

CLASSIFICATION.	COMMUNICATION.		NO COMMUNICATION.		TOTAL.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Milwaukee	359	33.99	1,448	36.46	1,807	35.74
Outside Milwaukee	697	66.01	2,523	63.54	3,220	64.26
Total	1,056	100.00	3,971	100.00	5,027	100.00

KIND OF COMMUNICATION.

CLASSIFICATION.	MILWAUKEE.		OUTSIDE MILWAUKEE.		TOTAL.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Electric Bells	235	65.46	285	40.89	520	49.24
Phones	55	15.32	31	4.45	86	8.14
Speaking Tubes	14	3.90	45	6.45	59	5.69
Whistles	55	15.32	326	48.21	391	37.03
Total	359	100.00	697	100.00	1,056	100.00

In establishments having machinery of any kind, some sort of signal service is required by law for the protection of employees. An investigation was made in regard to this and as a result we find that of the total 5,027 buildings, 1,056 had the required communication, while the remaining 3,971 had not.

As to kind of communication, bells seem to be most in use, and next in order came whistles.

In Milwaukee out of the 359 having the required communication, 235, or 65.46 per cent, were bells. Of the 697 places outside the city, 285, or 40.89 per cent, were bells also; while of the total, 520, or 49.24 per cent, were bells.

Of the remaining 536 signals in use, 391 consisted of whistles, 86 of 'phones, and 59 of speaking tubes. Clutch pulleys were also used to stop machinery, but of these no record was kept.

NUMBER OF EMERY AND POLISHING WHEELS AND NUMBER OF SUCH WHEELS HAVING SUCTION DEVICES AND GUARDS.

CLASSIFICATION.	TOTAL WHEELS.		SUCTION DEVICES.		GUARDS.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Milwaukee	1,107	34.08	205	31.59	155	27.73
Outside Milwaukee	2,141	65.92	444	68.41	404	72.27
Total	3,248	100.00	649	100.00	559	100.00

The inspection of emery wheels came under this head. The law requires that all wheels used in establishments and located at such places as to be dangerous to the employees when engaged in doing their duties, are to be guarded. An inspection of these was, therefore, necessary, and as a result we found that out of 3,248 inspected, 559 had guards and 649 suction devices. Of the total number of wheels inspected, 1,107 were found in Milwaukee. Of these 155 were guarded and 205 had necessary suction devices.

NUMBER OF VATS, PANS AND NUMBER OF SUCH HAVING GUARDS.

CLASSIFICATION.	VATS, PANS, ETC.		NOT GUARDED.	
	Number.	Per cent.	Number.	Per cent.
Milwaukee	595	10.11	459	18.51
Outside Milwaukee	5,290	89.89	2,021	81.49
Total	5,885	100.00	2,480	100.00

Vats and pans containing any molten metal or hot liquid were also inspected and seen to, so that they had the proper safeguards for preventing accidents. Some are so constructed or situated that no safety appliance would offer effective protection. In all cases where needed, and appliances could be added, the law was enforced. The total number of vats and pans in-

spected was 5,885, of which number 2,480 had the required guards, while the remaining did not need them or could not be protected. Only 3 needed guards and these were ordered.

NUMBER OF DOORS OR EXITS FROM FIRST FLOOR AND BASEMENT.

CLASSIFICATION.	FIRST FLOOR.		BASEMENT.	
	Number.	Per cent.	Number.	Per cent.
Milwaukee	6,917	36.10	627	50.08
Outside of Milwaukee	12,242	63.90	625	49.92
Total	19,159	100.00	1,252	100.00

HOW DOORS OPEN OR SWING.

CLASSIFICATION.	MILWAUKEE.		OUTSIDE MILWAUKEE.		TOTAL.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Doors swinging in	3,522	46.68	7,022	54.57	10,544	51.66
Doors swinging out	1,206	15.99	2,582	20.67	3,788	18.56
Doors swinging both ways	31	.41	36	.27	66	.32
Doors sliding	2,392	31.71	3,114	24.20	5,506	26.98
Doors lifting	338	4.48	41	.32	379	1.86
Doors open	55	.73	73	.57	128	.62
Total	7,544	100.00	12,867	100.00	20,411	100.00

There is a law which provides that in all factories, workshops, etc., the doors or exits should be so placed as to swing out, or both in and out.

In accordance with this law the Bureau has endeavored to enforce it wherever found violated.

By making a close study of the preceding tables, much light will be thrown upon the condition of the establishments in this respect. Altogether 20,411 doors or exits were inspected, of which 1,252 were exits from the basement and 19,159 were from the main floor. In Milwaukee, 3,522, or 46.6 per cent, of the 7,544 inspected, and in the state outside, 7,022, or 54.57 per cent of those inspected swung inward. Taking the state as a whole, 10,544, or 51.66 per cent of the total num-

ber inspected, swing in, which is more than half. The remaining 9,867 either opened outward, or were left open entirely. Where it was necessary for the safety of the people to have the doors swing out, orders were issued to that effect.

NUMBER OF BUILDINGS HAVING MECHANICAL VENTILATION, NUMBER AND CONDITION OF WATER CLOSETS.

CLASSIFICATION.	MECHANICAL VENTILATION.		CLOSETS.		CLOSETS IN BAD CONDITION.	
	Number	Per cent.	Number.	Per cent.	Number	Per cent.
Milwaukee	289	34.53	3,153	44.72	227	64.12
Outside Milwaukee	548	65.47	3,893	55.28	127	35.88
Total	837	100.00	7,061	100.00	354	100.00

The above table is devoted to the sanitary conditions of different establishments. What constitutes the sanitary condition is difficult to decide, but to make some sort of a definition, we would say that it has reference to over-crowding, poor ventilation, bad condition of water closets, etc.

Reports under this head can be summed up as in the above table. It shows the number of buildings having ventilation devices and also gives the number and per cent of the closets inspected and those being in bad condition.

From this we notice that 837 buildings had mechanical devices for ventilation. Of the 1,807 buildings in Milwaukee only 289 had devices. The balance either did not need them, or if they did, were ordered to put them in; 7,051 closets were also inspected, of which number 354 were in bad condition and needed to be replaced.

NUMBER OF BUILDINGS PROVIDED WITH SEATS FOR FEMALE EMPLOYEES.

CLASSIFICATION.	BUILDINGS.	
	Number	Per cent.
Milwaukee	574	33.13
Outside Milwaukee	755	66.87
Total	1,129	100.00

Where female help is used, seats for these should be installed, as the law requires it.

The number of buildings found having the required seats numbered 1,129, of which 374 were in Milwaukee. Establishments employing female help and not having seats numbered 7, and these were ordered to procure same.

NUMBER OF ESTABLISHMENTS IN WHICH ACCIDENTS, RESULTING IN INJURIES TO EMPLOYEES, OCCURRED, AND THE NUMBER OF SUCH ACCIDENTS.

CLASSIFICATION.	ESTABLISHMENTS.		ACCIDENTS.	
	Number.	Per cent.	Number.	Per cent.
Milwaukee	80	28.07	868	42.49
Outside Milwaukee	206	71.93	1,175	57.51
Total	286	100.00	2,043	100.00

• CLASSIFICATION OF ACCIDENTS.

CLASSIFICATION.	MILWAUKEE.		OUTSIDE MILWAUKEE.		TOTAL.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Fatal	9	1.04	39	3.32	48	2.35
Temporary Injury	835	96.20	1,090	92.77	1,925	94.22
Permanent Injury	24	2.76	46	3.91	70	3.43
Total	863	100.00	1,175	100.00	2,043	100.00

For knowing the numbers, cause, character and result of accidents one can readily see in what industry and around what kind of machinery they mostly occur. This being the case, one would know where to make a rigid enforcement of the law and what machinery needed protective measures most.

But in Wisconsin, as well as in many other states, there is no law whereby the operators of factories and workshops are required to furnish a report of the number and the particulars of each accident.

We do not, therefore, claim that the data here collected regarding accidents is as complete as it might be, but under the circumstances a more complete list could not be had.

The reported number of accidents during the year is 2,043. These took place in 285 establishments, or on an average there were 7 accidents to an establishment. Of the 2,043 accidents, 48 resulted fatally, 1,925 in temporary injury and 70 in permanent injury. This shows that only 2.35 per cent of accidents resulted fatally, while the largest majority, or 94.22 per cent, resulted in temporary inability. Of the total accidents, 868 were in Milwaukee, while the balance took place throughout the state.

NUMBER OF ENGINEERS AND AVERAGE YEARS OF EXPERIENCE AND
TIME IN PRESENT SERVICE.

	Number.
Engineers included	1,150
Average number of years of experience	14
Average number of years in present service	6

Efforts were made to learn from the engineers in charge of engines and boilers in the factories included, first how long they had been engaged as engineers, and second, how long they had been employed in their present position.

In all 1,150 engineers were thus reached. The average experience of each, when computed, was found to be nearly 14 years, and the average time of service in the position they then held was about 6 years.

ANALYSIS OF THE WORK PERFORMED BY THE INSPECTORS FROM
JUNE 22, 1901, TO AUGUST 30, 1902, OR FOR 14 MONTHS.

The foregoing portion of this part, under the head of "Factory Inspection," show a record of 3,059 separate factories and workshops, together with summaries for places where the plants are located and also by industries. Statements are also included showing the location of our principal industries and the relative importance of our principal cities as industrial centers. The more important facts have also been briefly explained and in addition to this is found a fairly complete analysis of the factory inspectors' report upon 2,895 of the above factories.

The facts thus presented have been compiled from the reports of the factory inspectors. The reports thus compiled cover one inspection only of each of the places during the period, and are therefore not in any sense a complete record of the work of the inspectors since the last report of this Bureau. The greater proportion of the places in the state are not inspected once only during each year or term, but as often as it is possible to visit them. Frequent visits are absolutely necessary to even fairly complete enforcement of the law; and especially is this true of places where children are employed. This demand we have endeavored to meet. And in order to convey some idea of the amount of work performed in this respect, the following pages have been devoted to showing the number of inspections made, the number of orders issued, and the amount of other work performed during a definite period, or from June 22, 1901, to August 30, 1902.

It should perhaps be added that the period covered here was in no sense busier than any other. The inspectors simply performed about the same amount of work as is required of them at all times. The facts thus presented are typical and can safely be used as a basis upon which to compute their work for any other period.

NUMBER OF BUILDINGS OR PLACES INSPECTED FROM JUNE 22ND,
1901, TO AUGUST 30TH, 1902.

CLASSIFICATION.	BUILDINGS INSPECTED.	
	Number.	Per cent.
Factories and workshops	8,989	77.79
Cigar factories	663	5.74
Garment making shops	313	2.71
Building operations	15	.13
Summer gardens	22	.19
Bowling alleys	68	.59
Mercantile establishments	334	2.89
Offices	19	.16
Hotels	296	2.56
Boarding houses	21	.18
Lodging or tenement houses	12	.10
Schools	211	1.83
Office buildings	58	.50
Opera houses	41	.35
Assembly halls	48	.42
Hospitals	13	.11
Churches	367	3.18
Other places	66	.57
Total	11,556	100.00

The preceding table shows the number of inspections that were made by the inspectors from the latter part of June, 1901, to the end of August, 1902, or during a period of 14 months.

The total number of places thus visited and inspected during the period is 11,556. These places in the table have been classified according to kind, and the number of each kind together with its per cent of the total are shown.

Of the places inspected, factories and workshops are the first in importance. In the table these places are classified as factories, etc., cigar factories, and garment making shops. The former includes 8,989 places, or 77.79 per cent of the total; the second in order includes 663, or 5.74 per cent of the total; and the third or garment making, includes 313 places, or 2.71 per cent of the total, taking all the factories and shops, and it is found that together they numbered 9,965, or 86.24 per cent of the total. That the factories and workshops should thus have constituted over 86 per cent of all the places inspected is perfectly natural, for these are the places that are mostly affected by the factory laws, or the provisions in the laws of this state, which it is our duty to enforce.

Next to factories, etc., such places as mercantile establishments, hotels, churches and schools show the greatest number of inspections. Then follows a variety of places which it is not necessary to enumerate, but which are more or less affected by the provisions in the laws. In considering the table as a whole it will be noticed that it includes 18 classes of places, all of which are included in the inspection.

The next table in order exhibits the orders for improvements in the conditions which were issued by the inspectors during the period covered by the inspections in the above table.

NUMBER OF ORDERS ISSUED FROM JUNE 22ND, 1901, TO AUGUST 30TH, 1902.

CLASSIFICATION.	ORDERS ISSUED.	
	Number	Percent.
1. Hours of labor for children	79	.46
2. Children under 14 years of age dismissed	688	3.97
3. Children under 16 years of age dismissed	1,128	6.51
4. Boilers	61	.35
5. Buildings	201	1.16
6. Fire escapes and standpipes	538	3.10
7. Stairways	351	2.02
8. Elevators and Hoists	405	2.34
9. Signals	218	1.27
10. Machinery	4,244	24.47
11. Polishing and emery wheels	1,137	6.55
12. Doors	1,466	8.39
13. Ventilation and sanitation	1,389	8.00
14. Seats for women	502	2.89
15. Registers of children employed	123	.71
16. Affidavits	401	2.32
17. Other orders	4,424	25.49
Total	17,355	100.00

The above table shows the number and kind of orders issued during the period covered by these tables. In other words, it gives in a rather plain form the number of instances in which the proprietors or operators of the places inspected had neglected to comply with the regulations imposed upon them by the factory laws. By doing this it also shows why the inspections were necessary.

The first item on the table shows that 79, or less than one-half of one per cent of the orders issued related to the hours of labor for children under 16 years of age. The law prohibits the employment of any children under this age before 6 o'clock in the morning and after 9 o'clock at night. There were 79 cases where this law was violated and it was for the correction of this that the orders were issued. As this order or notice was all that was necessary in order to set things right to have the law complied with, no prosecutions were resorted to in these cases.

The second item relates to children under 14 years of age. Under the law no children under this age shall be employed in factories, etc., except in certain extreme cases where a permit to this effect has been granted to children over 12 years of age. These provisions are extremely difficult to enforce, and, particu-

larly in the past, have been quite extensively violated. Many parents desire the earnings of their children to help out in their otherwise often very meager income. Employers are often on the lookout for cheap help and are glad to employ boys over 12 years of age. To both sides there is therefore a temporary advantage in such employment. This in turn causes many to try to evade this law. The incentive to do so is often so strong that they risk both prosecution before courts and the fines thus imposed. During the time covered by the table many violations of this law were discovered. The table shows that 688 children were dismissed from work because of their age. This, however, does not tell the whole story on this point. Children under 14 years, who were found at work by the inspectors, were reported to the Bureau under two heads. Those whose parents were in such circumstances that they were not under the law entitled to a permit to work were reported as dismissed. Those again who, while employed without a permit, were clearly entitled to one, at least during their school vacation, were reported under permits issued. It is true that those who had employed them before a permit had been granted were technically in violation of the law, but when the children were in needy circumstances this was not considered cause for prosecution. As will be seen later, the number of permits granted was 3,765, and a large proportion of these were to children already employed. From this it is plain that the number of children under 14 who were employed, particularly during the summer months or school vacation, was much greater than the number reported as dismissed.

The third item shows the number of children under 16 years of age who, being employed without the required affidavit as to age, were dismissed until such affidavits had been secured. The total number reported in this case, was 1,128. This number, however, does not represent all who were found without affidavits, because in a large number of cases, when conditions were such as to warrant it, the inspectors made out affidavits at the time and thus permitted the children to remain without loss of time and also saved them the cost of having the affidavit executed before an outside notary. Just how many affidavits were

issued in this way cannot be given as they were reported in, together with those issued in the offices of this Bureau in such a way that they could not be separated, but they were quite numerous.

The purpose of requiring affidavits as to age from all children under 16 years of age is to assist in determining their ages and thus enable the inspectors to more fully enforce the provision which limits the factory age of children, except in certain cases, to 14 years.

The fourth item relates to boilers. There is no provision in the factory laws that requires or authorizes the inspectors to inspect boilers. Cases are often met with, however, where the boilers or things connected with them are so defective as to make the situation about them extremely dangerous. In such cases the inspectors often step in, and under the laws which require protection from dangerous machinery, require the proprietors to make the necessary repairs. During the period in question 61 such changes were ordered, and these changes were of such a nature as to greatly improve the situation from the point of view of safety to the employes.

The fifth item in the table relates to buildings. There are not many provisions in the factory laws that directly affect the buildings, as separated from the machinery and fixtures in them. But whenever any building of those embraced in the inspection is found to have weak floors or to be over-loaded in anyway, so as to make it dangerous to those employed therein, steps are always taken to have the defect remedied. As the table shows, 201 orders for such improvements were made.

The sixth item relates to fire escapes and standpipes. The law requires that all public or semi-public buildings of three or more stories in height, in which 25 or more persons are employed or occupied, shall be provided with fire escapes, etc. This is an important provision and everything has been done to enforce it. During the time given the inspectors issued 538 orders for new escapes, and for improvements and repairs of old ones. This number constitutes 3.10 per cent of the acts performed by the inspectors. While thus many new escapes have been erected during the year and many defective ones have been

proved, there is yet a good deal to be accomplished in this direction. New buildings are constantly going up. Old buildings are enlarged so as to come within the law. Old escapes are tearing out, or getting out of repair. There are also buildings in which escapes should have been erected long ago, but where all the pressure to that end we so far have been able to bring to bear has failed to produce the desired results. While for this reason there are thus a few places in the state without adequate protection in case of fire, the situation as a whole in this respect is not in any sense bad.

Stairways and elevators make up the seventh and eight items in the table. These means for reaching places above the first floor, or the ground, are required to be kept in a safe condition. The necessity for this requirement is easily seen. Serious accidents are often occurring to both passengers and workmen through defects and weak spots in stairways and passenger elevators. That the inspectors met with plenty of such defects is evidenced from the fact that 351 orders were made for the fixing up of stairways and 405 for putting elevators in the proper condition. In their nature the orders varied so much that it would occupy too much space to describe them separately. But some were entirely new stairways and elevators; others, again, were for the strengthening of weak spots and for providing proper hand rails and gates.

The ninth item is for signals. The law requires some means for communication between engineer and workrooms where machinery is used, in order that the machinery may be quickly stopped in case of accidents. This is regarded as a wise provision. There are no doubt many cases where lives have been saved through such signals, as well as many where fatal accidents could have been prevented had such signals been provided. Upon examining the conditions in this respect the inspectors found it necessary to order the providing of effective systems of signals in 218 places.

Machinery is the tenth item in the table. Under the law dangerous machinery must be guarded or protected. Machinery, however, varies so much in kind that it cannot be described. Nor is this possible for the various devices that have been in-

vented for protection of dangerous parts. It is often even impossible to determine whether a machine is dangerous or not. Nevertheless the inspectors are doing their best to get some light on these points. They carefully inspect the machinery in each place visited, and wherever they find machines that need protection and can be protected without making the machine useless for the purpose it is intended for, see to it that proper guards are provided and placed in position. That provisions for this purpose are wise need hardly be said. Where machinery is left unprotected the number of accidents or mutilations that result is simply frightful. Even when protected there are numerous accidents, because there are many machines that cannot be completely guarded and still retain their usefulness. Dangerous spots will often remain exposed even after the best has been done. Many workmen also dislike guards because they may happen to cause them some inconvenience in operating the machine, and hence often remove them after they have been placed in position. In other words, they prefer to run the risk of being injured to a little inconvenience. This is due to thoughtlessness, pure and simple. It is met with so often, however, that it has become quite a problem. Just what steps ought to be taken to prevent removals of guards may be a question. But it certainly seems that a workman who removes guards once placed in position is as guilty of neglect as the proprietor would have been had he failed to furnish them. During the inspection in question, 4,244 machines or parts of machines were ordered protected. The fact that the inspectors should have deemed so many machines as this dangerous is the best evidence of what is necessary to be done in this line.

The eleventh item is that for polishing and emery wheels. Such are not always directly dangerous or the cause of accidents, but the dust they raise is often in the long run very injurious to the health of those who have to operate them or who work in the same room. For this reason the law requires suction devices to be placed on such wheels for the purpose of carrying off the dust. This, it will thus be seen, is a very important provision and has been vigorously enforced. In all 1,137 orders relating to such wheels and devices were issued, the car-

ying out of which caused many improvements in the sanitary conditions.

Doors is the twelfth in order. It is very important, particularly in certain cases, that the doors should open outwardly. In buildings with a large number of workmen and a great deal of combustible material a fire usually causes such rush and pressure on all the avenues of escape that unless these open out, safe exit is almost impossible. There are many shops, however, where doors, both at the foot of stairways and those leading to the street, open in. In fact such places were so numerous that the inspectors found it necessary to issue 1,466 orders for a change in this respect.

Ventilation and sanitation is the thirteenth in order. Bad sanitation in a place may arise from innumerable causes. In some cases dust and smoke are of necessity emitted by the machinery and other forces. In others the shops are so constructed that bad ventilation is inevitable. There are also cases where bad orders and air arise from bad sewerage or from the very business that is carried on. In the greater part of such instances mechanical contrivances are about the only means by which even fairly pure air can be gotten into the workrooms. Whenever needed such contrivances are also ordered. The table shows that 1,389 orders were issued for this purpose.

Seats for women occupies the fourteenth place. The law requires such seats to be provided whenever practicable. This is a necessary provision, especially in view of the fact that it is conducive to health. In most cases the duties of women in factories and stores are also such that they in many cases can be performed fully as well when sitting down as when standing. In all 502 orders for such seats were issued during the period.

Registers for children under 16 years of age are needed in order to help in detecting violation of the law. Many places where children are employed neglected to keep such records and were therefore ordered to keep them in the future. Item fifteen shows that 123 orders were made for such registers.

Item sixteen relates to affidavits. It shows that 401 orders were issued on this point. Orders in this respect were issued when the conditions were such that affidavits could not be issued

at the time. In Milwaukee the greater proportion of children obtain their affidavits in the factory inspector's office, where they are issued free of charge.

Item seventeen shows all other orders and acts than those otherwise enumerated in the table. These acts are quite numerous, making a total of 4,424, or 25.49 per cent, of all the acts performed during the period. They consist of suggestions and acts of almost every kind. The inspectors are often consulted on all sorts of matters relating to factories and buildings and always render any assistance they are capable of. Such acts are reported, but they are too varied for enumeration and hence included under one head.

The preceding table thus shows that the orders of the inspectors were classified into 17 classes and that the number of orders in each class varies from 61 in the case of boilers to 4,424 in the case of "Other orders," or the unclassified acts. Outside of "Other orders" machinery shows the greatest proportion; in fact the orders in this case constituted almost 25 per cent of the total. The orders relating to children is next in number. Then comes those which relate to the safety in case of fire and to sanitation. The table certainly indicates that a great deal of valuable work was performed during the period.

The following table is an exhibit of such acts as could not be classed as orders, but which were performed during the period in question.

NUMBER OF OTHER ACTS PERFORMED BY THE INSPECTORS FROM
JUNE 22ND, 1901, TO AUGUST 30TH, 1902.

CLASSIFICATION.	OTHER WORK.	
	Number.	Per cent.
Temporary permits to children between 12-14 years	3,765	28.29
Affidavits issued to children under 16 years	4,716	47.95
Licenses granted for garment making	280	2.85
Licenses for garment making revoked	6	.06
Licenses granted for cigar making	37	.38
Factories visited for special data	622	6.43
Other acts	376	3.82
Prosecutions	22	.22
Total	9,824	100.00

Here is a list of "Other acts" performed by the inspectors. Besides visiting and inspecting certain places and issuing orders for the compliance with the law and seeing to it that these orders were carried out, the inspectors performed a great deal of work that cannot properly be classed under either of these heads. These acts, as far as they could be gotten at, are exhibited in the above table.

The total number of such acts, so far as they could be enumerated, was 9,834. Of these 3,765, or 38.29 per cent, consisted of making out permits to work for a limited period, to children between 12 and 14 years of age; and 4,716, or 47.95 per cent, consisted of making out that many affidavits as to age of children under 16 years. The table also shows that 280 licenses to carry on their work were issued to places where garments were made, and that 37 cigar factories were given a similar license. It further shows that six of the licenses given to garment-making shops were revoked because they did not comply with rules; that 632 places were visited for special data; that there were 376 acts of various kinds that are not described in detail; and 22 parties were prosecuted for violating the child labor and other laws.

The work thus performed by the 8 inspectors during the period of 14 months may be summarized as follows:

CLASSIFICATION.	Total number.	Av. to each inspector.
Places inspected	11,556	1.445
Orders issued	17,355	2,170
Other acts	9,834	1,230
Total	38,745	4,845

From this summary it is found that the total number of acts performed by the inspectors during the time in question was 38,745, or an average of 4,845 to each inspector. As this period covered about 350 working days this average is equal to about 14 inspections and acts daily to each inspector. But this is not all. The inspectors must report in full upon each place inspected and forward the report to this Bureau. They must

also make weekly reports showing in detail the amount of work performed during the week. They also have many things to look after that cannot possibly be shown in a report like this. Considering everything, therefore, it is plain that the inspectors after properly performing these duties could not have had a great deal of surplus time on their hands.

